

Operation Manual

NAVIGATION AV SYSTEM

AVIC-F50BT AVIC-F950DAB AVIC-F950BT AVIC-F850BT

Be sure to read **Important Information for the User** first!

Important Information for the User includes the important information that you must understand before using this navigation system.

Thank you for buying this Pioneer product.

Please read through these instructions so you will know how to operate your model properly. *After you have finished reading the instructions, keep this document in a safe place for future reference.*



Important

The screens shown in the examples may differ from actual screens, which may be changed without notice for performance and function improvements.

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Manual overview

Before using this product, be sure to read **Important Information for the User** (a separate manual) which contains warnings, cautions, and other important information that you should note.

The screen examples shown in this manual are those for AVIC-F50BT. The screens may vary according to the models.

How to use this manual

Finding the operation procedure for what you want to do

When you have decided what you want to do, you can find the page you need from the *Contents*.

Finding the operation procedure from a menu name

If you want to check the meaning of an item displayed on screen, you will find the necessary page from the *Display information* at the end of the manual.

Glossary

Use the glossary to find the meanings of terms.

Conventions used in this manual

Before moving on, take a few minutes to read the following information about the conventions used in this manual. Familiarity with these conventions will help you greatly as you learn how to use your new equipment.

- Buttons on your navigation system are described in **ALL CAPITALS, BOLD** lettering:
e.g.) **HOME** button, **MODE** button.
- Menu items, screen titles, and functional components are described in **bold** with double quotation marks “ ”:

e.g.)

“**Destination**” screen or “**Phone**” screen

- Touch panel keys that are available on the screen are described in **bold** in brackets []:
e.g.) **[Destination]**, **[AV Source]**.
- Extra information, alternatives and other notes are presented in the following format:
e.g.)
☐ If the home location has not been stored yet, set the location first.
- Functions of other keys on the same screen are indicated with ■ at the beginning of the description:
e.g.)
■ If you touch **[OK]**, the entry is deleted.
- References are indicated like this:
e.g.)
➤ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

Terms used in this manual

“Front display” and “Rear display”

In this manual, the screen that is attached to the body of this navigation unit will be referred to as the “Front display”. Any additional screen that is commercially available and can be connected to this navigation unit will be referred to as the “Rear display”.

“Video image”

“Video image” in this manual indicates moving images of DVD-Video, DivX®, iPod, and any equipment that is connected to this system with an RCA cable, such as general-purpose AV equipment.

Introduction

“External storage device (USB, SD)”

The SD memory card, SDHC memory card, microSD card, microSDHC card and USB memory device are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory only, it is referred to as the “USB storage device”.

“SD memory card”

The SD memory card, SDHC memory card, microSD card and microSDHC card are collectively referred to as the “SD memory card”.

“iPod”

In this manual, iPod and iPhone will be referred to as “iPod”. ■

Notice regarding video viewing

Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights as protected by the Copyright Law. ■

Notice regarding DVD-Video viewing

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited. ■

Notice regarding MP3 file usage

Supply of this product only conveys a licence for private, non-commercial use and does not convey a licence nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial,

satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent licence for such use is required. For details, please visit <http://www.mp3licensing.com>. ■

iPod compatibility

This product supports only the following iPod models and iPod software versions. Others may not work correctly.

Made for

- iPod touch (5th generation): iOS 6.0.1
 - iPod touch (4th generation): iOS 6.0.1
 - iPod touch (3rd generation): iOS 5.1.1
 - iPod touch (2nd generation): iOS 4.2.1
 - iPod touch (1st generation): iOS 3.1.3
 - iPod classic 160GB (2009): Ver. 2.0.4
 - iPod classic 160GB (2008): Ver. 2.0.1
 - iPod classic 80GB: Ver. 1.1.2
 - iPod nano (6th generation): Ver. 1.2
 - iPod nano (5th generation): Ver. 1.0.2
 - iPod nano (4th generation): Ver. 1.0.4
 - iPod nano (3rd generation): Ver. 1.1.3
 - iPhone 5: iOS 6.0.1
 - iPhone 4S: iOS 6.0.1
 - iPhone 4: iOS 6.0.1
 - iPhone 3GS: iOS 6.0.1
 - iPhone 3G: iOS 4.2.1
 - iPhone: iOS 3.1.3
- You can connect and control an iPod compatible with this navigation system by using separately sold connector cables.
- Operation methods may vary depending on the iPod models and the software version of iPod.
- Depending on the software version of the iPod, it may not be compatible with this equipment.
- For details about iPod compatibility with this navigation system, refer to the information on our website.

This manual applies to the following iPod models.

iPod with 30-pin connector

- iPod touch 4th generation
- iPod touch 3rd generation
- iPod touch 2nd generation
- iPod touch 1st generation
- iPod classic 160GB
- iPod classic 80GB
- iPod nano 6th generation
- iPod nano 5th generation
- iPod nano 4th generation
- iPod nano 3rd generation
- iPhone 4S
- iPhone 4
- iPhone 3GS
- iPhone 3G
- iPhone

iPod with Lightning connector

- iPod touch 5th generation
- iPhone 5 

Map coverage

For details about the map coverage of this navigation system, refer to the information on our website. 

Protecting the LCD panel and screen

-  Do not expose the LCD screen to direct sunlight when this product is not used. This may result in LCD screen malfunction due to the resulting high temperatures.
-  When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of spots, coloured stripes, etc.
-  To protect the LCD screen from damage, be sure to touch the touch panel keys only with your finger and do so gently. 

Notes on internal memory

Before removing the vehicle battery

If the battery is disconnected or discharged, the memory will be erased and must be reprogrammed.

-  Some data remains. Be sure to read *Setting items to be deleted* first.
 - ➔ For details, refer to *Setting items to be deleted* on page 168.

Data subject to erasure

The information is erased by disconnecting the yellow lead from the battery (or removing the battery itself).

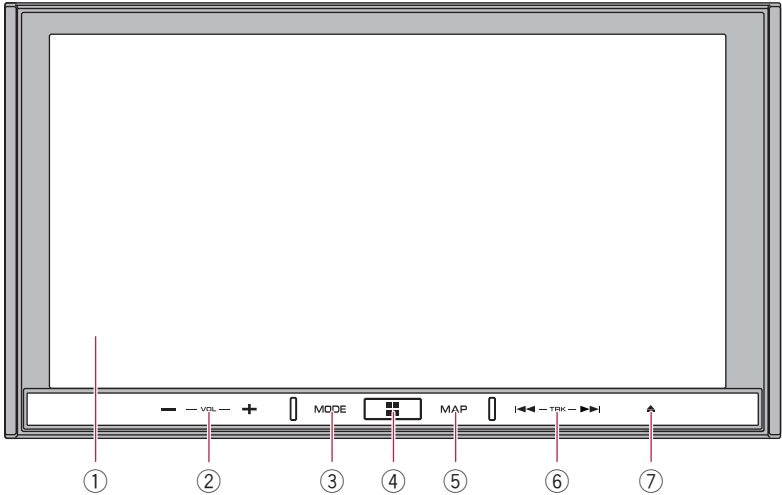
-  Some data remains. Be sure to read *Setting items to be deleted* first.
 - ➔ For details, refer to *Setting items to be deleted* on page 168. 

Introduction

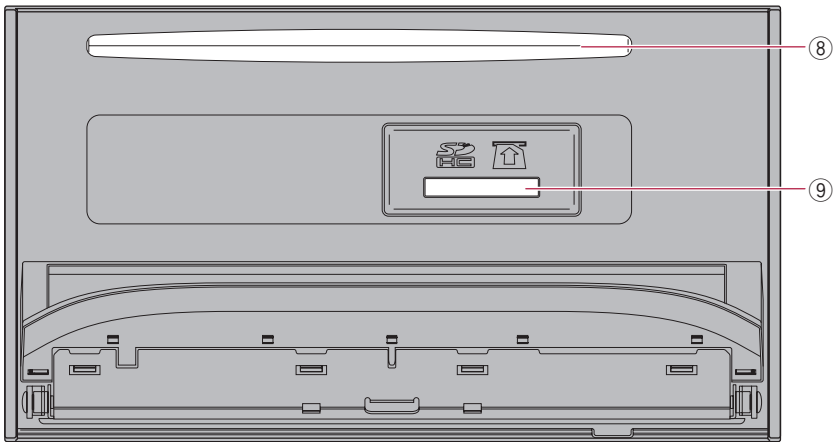
Checking part names and functions

This chapter gives information about the names of the parts and the main features using the buttons.

AVIC-F50BT (with the LCD panel closed)

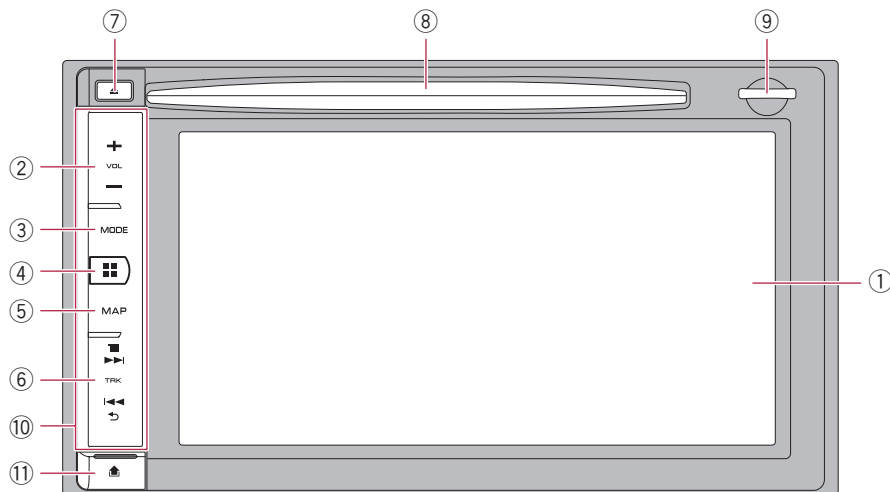


AVIC-F50BT (with the LCD panel open)



Basic operation

AVIC-F950DAB, AVIC-F950BT, and AVIC-F850BT



① LCD screen

② VOL (+/-) button

Press to adjust the AV (Audio and Video) source volume.

③ MODE button

- Press to switch the screen to the AV operation screen or the **AppRadio Mode** screen.
 - ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.
- Press to switch between the **AppRadio Mode** screen and the AV operation screen.
 - ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.
- Press and hold to display the "**Picture Adjustment**" screen.
 - ➡ For details, refer to *Adjusting the picture* on page 159.
- Press and hold to display the touch panel calibration screen while the "**Picture Adjustment**" screen is displayed.
 - ➡ For details, refer to *Adjusting the response positions of the touch panel (touch panel calibration)* on page 145.

④ HOME button

- Press the **HOME** button to display the "**Top Menu**" screen while the map screen, the AV operation screen, or the application menu screen is displayed.
- Press to switch the application operation screen to the application menu screen.
 - ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

⑤ MAP button

- Press to display the current location when the navigation screen (showing other than the current location) is displayed. When the current location is displayed, the screen changes to the registered map scale. When the AV source screen is displayed, it switches to the current location screen.
 - ➡ For details, refer to *Registering a scale* on page 36.
- Press and hold to temporarily clear the screen regardless of whether it is the AV source, the current location screen or the **AppRadio Mode** screen.

- ➔ For details, refer to *Temporarily clearing the screen (navigation system in standby mode)* on page 23.

⑥ TRK button

- Press to perform manual seek tuning, fast forward, reverse and track search controls.
- Press to perform the back and menu function of the Android device when you use the **AppRadio Mode** with an Android device.

⑦ ▲ button

⑧ Disc-loading slot

Insert a disc to play.

- ➔ For details, refer to *Inserting and ejecting a disc* on page 17.

⑨ SD card slot

- ➔ For details, refer to *Inserting and ejecting an SD memory card* on page 18.

⑩ Detachable faceplate

⑪ 🏠 button

Press to remove the detachable faceplate from the navigation system.

- ➔ For details, refer to *Removing the detachable faceplate* on page 16. ▣

Protecting your product against theft

- ▣ This function is available on AVIC-F950DAB, AVIC-F950BT, and AVIC-F850BT.

The detachable faceplate can be detached from the navigation system to discourage theft, as described below.

! CAUTION

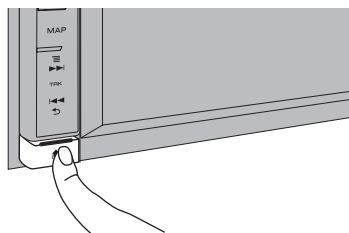
- Do not expose the detachable faceplate to excessive shock or disassemble it.
- Never grip the buttons tightly or use force when removing or attaching.
- Keep the detachable faceplate out of reach of small children to prevent them from placing it in their mouths.

- After removing the detachable faceplate, keep it in a safe place so it is not scratched or damaged.
- Do not expose the detachable faceplate to direct sunlight and high temperatures.
- When removing or attaching the detachable faceplate, do so after turning off the ignition switch (ACC OFF).

Removing the detachable faceplate

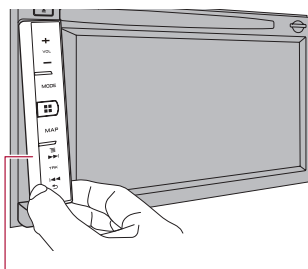
- ▣ The navigation system cannot be operated while the detachable faceplate is removed from the navigation system.

1 Press the 🏠 button.



When you release your finger, the bottom of the detachable faceplate separates slightly from the navigation system.

2 Gently grip the bottom of the detachable faceplate and slowly pull it outward.



Detachable faceplate

Basic operation

Attaching the detachable faceplate

1 Slide the detachable faceplate all the way into the navigation system.

Make sure the detachable faceplate is securely connected to the mounting hooks of the navigation system.

2 Push the lower part of the detachable faceplate until you hear a click.

If you fail to successfully attach the detachable faceplate to the navigation system, try again but be careful not to force it as the panel could be damaged. 

Adjusting the LCD panel angle

-  This function is only available on AVIC-F50BT.

WARNING

Keep hands and fingers clear of the unit when opening, closing, or adjusting the LCD panel. Be especially cautious of children's hands and fingers.

CAUTION

Do not open or close the LCD panel by force. This may cause a malfunction.

1 Press the button.

The "Monitor Setup" screen appears.

2 Touch or to adjust the angle.



3 Touch .

-  The adjusted angle of the LCD panel will be memorised and the LCD panel will automatically return to that angle the next time the LCD panel is opened or closed. 

Inserting and ejecting a disc

Inserting a disc (for AVIC-F50BT)

WARNING

- Keep hands and fingers clear of the unit when opening, closing, or adjusting the LCD panel. Be especially cautious of children's hands and fingers.
- Do not use with the LCD panel left open. If the LCD panel is left open, it may result in injury in the event of an accident.

CAUTION

- Do not open or close the LCD panel by force. This may cause a malfunction.
- Do not operate this navigation system until the LCD panel has completely opened or closed. If this navigation system is operated while the LCD panel is opening or closing, the LCD panel may stop at that angle for safety.
- Do not place a glass or can on the open LCD panel. Doing so may break this navigation system.
- Do not insert anything other than a disc into the disc-loading slot.

1 Press the button.

The "Monitor Setup" screen appears.

2 Touch [Open].



The LCD panel opens, and the disc-loading slot appears.

3 Insert a disc into the disc-loading slot.

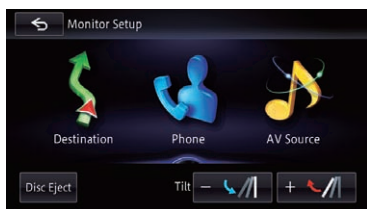
The disc is loaded, and the LCD panel closes.

Ejecting a disc (for AVIC-F50BT)

1 Press the button.

The "Monitor Setup" screen appears.

2 Touch [Disc Eject].



The LCD panel opens, and the disc is ejected.

3 Remove the disc, and press the ▲ button.

The LCD panel closes.

Inserting a disc (for AVIC-F950DAB, AVIC-F950BT and AVIC-F850BT)



CAUTION

Do not insert anything other than a disc into the disc-loading slot.

- Insert a disc into the disc-loading slot.

Ejecting a disc (for AVIC-F950DAB, AVIC-F950BT and AVIC-F850BT)

- Press the ▲ button.

The disc is ejected.

Inserting and ejecting an SD memory card



CAUTION

- Ejecting an SD memory card during data transfer can damage the SD memory card. Be sure to eject the SD memory card by the procedure described in this manual.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.
- Do not insert anything other than SD memory cards.

- ❑ This system is not compatible with the Multi Media Card (MMC).
- ❑ Compatibility with all SD memory cards is not guaranteed.
- ❑ This unit may not achieve optimum performance with some SD memory cards.

Inserting an SD memory card (for AVIC-F50BT)



CAUTION

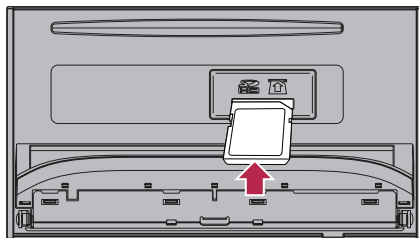
- Do not press the ▲ button when an SD memory card is not fully inserted. Doing so may damage the card.
- Do not press the ▲ button before an SD memory card has been completely removed. Doing so may damage the card.

1 Press and hold the ▲ button.

The LCD panel opens fully.

2 Insert an SD memory card into the SD card slot.

Insert it with the label surface face-up and press the card until it clicks and completely locks.



3 Press the ▲ button.

The LCD panel closes.

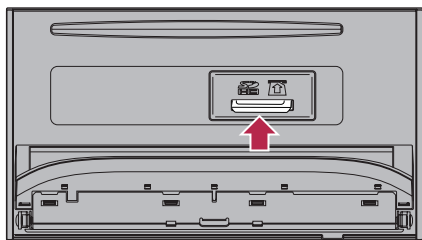
Ejecting an SD memory card (for AVIC-F50BT)

1 Press and hold the ▲ button.

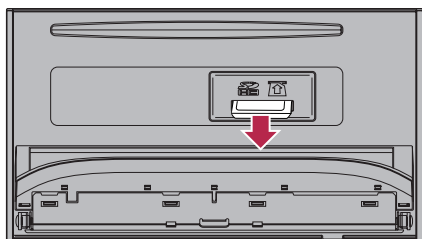
The LCD panel opens fully.

Basic operation

- 2 Press the middle of the SD memory card gently until it clicks.



- 3 Pull the SD memory card out straight.



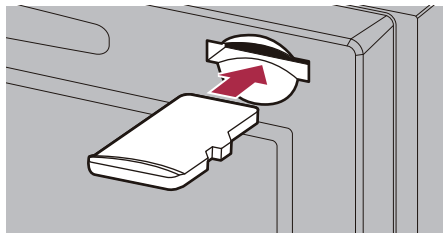
- 4 Press the  button.

The LCD panel closes.

Inserting an SD memory card (for AVIC-F950DAB, AVIC-F950BT and AVIC-F850BT)

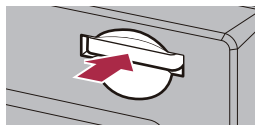
- Insert an SD memory card into the SD card slot.

Insert the SD memory card with the terminal contacts face-down, and press the card until it clicks and locks completely.



Ejecting an SD memory card (for AVIC-F950DAB, AVIC-F950BT and AVIC-F850BT)

- 1 Press the middle of the SD memory card gently until it clicks.



- 2 Pull the SD memory card out straight.



Connecting and disconnecting an iPod



CAUTION

- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, iPhone, smartphone, or other devices while using this product.

Connecting your iPod

For iPod with 30-pin connector users

Using a USB interface cable for iPod / iPhone (CD-IU201N) (sold separately), you can connect your iPod to the navigation system.

- ❑ For details about iPod compatibility with this navigation system, refer to the information on our website.
- ❑ Connection via a USB hub is not possible.

For iPod with Lightning connector users who use a USB interface cable for iPod / iPhone

You can connect your iPod with this navigation system by using a USB interface cable for iPod / iPhone (CD-IU201N) (sold separately) and a Lightning to 30-pin Adapter (Apple Inc. products) (sold separately).

However, functions related to iPod video files are not available.

For iPod with Lightning connector users who use an HDMI/USB interface cable for iPod / iPhone

To play music and/or video files on your iPod with this navigation system, connect the following cables, and launch **CarMediaPlayer** while in **AppRadio Mode**.

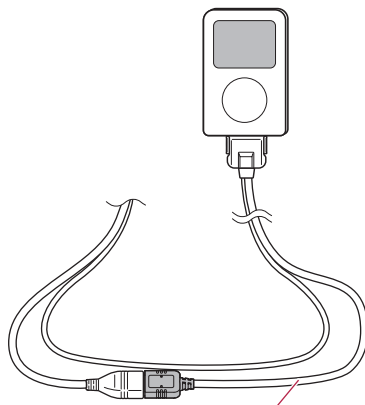
- HDMI/USB interface cable for iPod / iPhone (CD-IH202) (sold separately)
- Lightning Digital AV Adapter (Apple Inc. products) (sold separately)

- Lightning to USB cable (supplied with iPhone with Lightning connector)
- For details of **AppRadio Mode**, refer to Chapter 25.
- Refer to the **CarMediaPlayer** manual for more information.

1 Check that no USB storage device is connected.

2 Connect your iPod.

- For details of the operations, refer to the Installation Manual.
- **For iPod with 30-pin connector users**

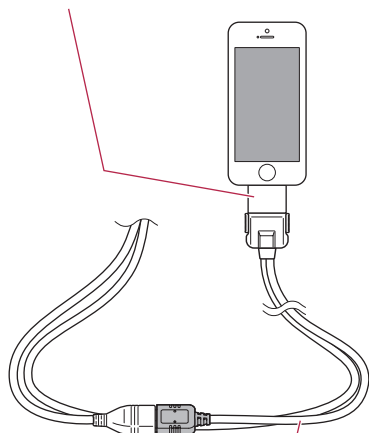


USB interface cable for iPod / iPhone

Basic operation

- For iPod with Lightning connector users who use a **USB** interface cable for iPod / iPhone

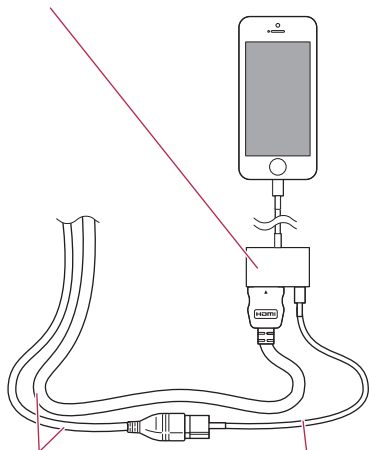
Lightning to 30-pin Adapter



USB interface cable for iPod / iPhone

- For iPod with Lightning connector users who use an **HDMI/USB** interface cable for iPod / iPhone

Lightning Digital AV Adapter



HDMI/USB interface cable for iPod / iPhone

Lightning to USB cable

Disconnecting your iPod

- Pull out the cables after confirming that no data is being accessed. 

Plugging and unplugging a USB storage device



CAUTION

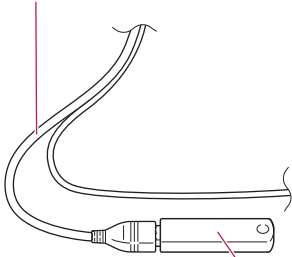
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
 - Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, iPhone, smartphone, or other devices while using this product.
- ☐ This navigation system may not achieve optimum performance with some USB storage devices.
 - ☐ Connection via a USB hub is not possible.
 - ☐ A USB interface cable for iPod / iPhone (sold separately) is required for connection. iPod with Lightning connector users can also connect a USB storage device to this navigation system by plugging it into the USB port of the other separately sold cable.

Plugging in a USB storage device

- 1 Pull out the plug from the USB port of the USB interface cable for iPod / iPhone.

2 Plug a USB storage device into the USB interface cable for iPod / iPhone.

USB interface cable for iPod / iPhone



USB storage device

Unplugging a USB storage device

- Pull out the USB storage device after checking that no data is being accessed. ☐

Startup and termination

1 Start the engine to boot up the system.

After a short pause, the splash screen comes on for a few seconds.

- ☐ To protect the LCD screen from damage, be sure to touch the touch panel keys only with your finger and do so gently.

2 Turn off the vehicle engine to terminate the system.

The navigation system is also turned off. ☐

On first-time startup

When you use the navigation system for the first time, select the language that you want to use.

1 Start the engine to boot up the system.

After a short pause, the splash screen comes on for a few seconds.

2 Touch the language that you want to use on screen.



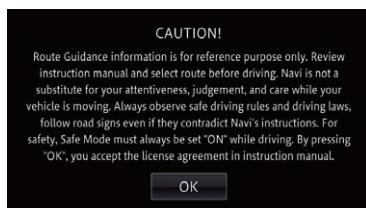
3 Touch the language that you want to use for the voice guidance.



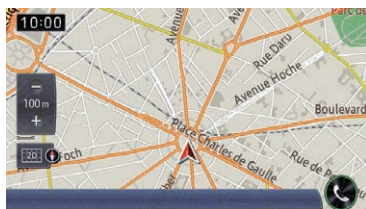
The navigation system will now restart.

Basic operation

4 Read the terms carefully, checking the details, and then touch [OK] if you agree to the conditions.



The map screen appears.



Regular startup

● Start the engine to boot up the system.

After a short pause, the splash screen comes on for a few seconds.

- ☐ The screen shown will differ depending on the previous conditions.
- ☐ If the anti-theft function is activated, you must enter your password.
- ☐ The terms appear if the previous condition was the navigation screen.

Read the terms carefully, checking the details, and then touch **[OK]** if you agree to the conditions.

After you touch **[OK]**, the screen that was displayed just before turning off the ignition switch (ACC OFF) is displayed.

A message about the map database

After you start using this navigation system, a message related to map data may be displayed.

- ☐ This message is displayed the first time you turn on the navigation system each month.
- ☐ Touch the message to close it or it will disappear automatically after eight seconds. ☐

Demonstration images

If you do not operate this navigation system for five minutes, demonstration images are displayed.

- ☐ The demonstration images will not be displayed if you drive after mounting this navigation system. ☐

Temporarily clearing the screen (navigation system in standby mode)

You can temporarily clear the screen at night or when the screen is too bright.

● Press and hold the MAP button.

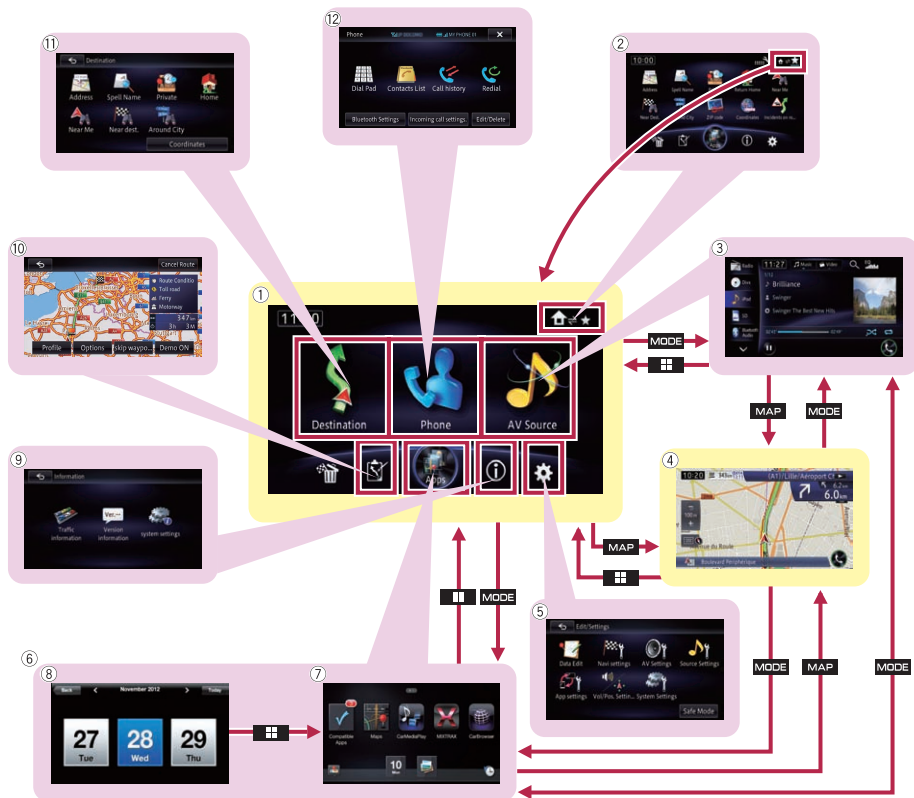
The screen is cleared temporarily.

- ☐ If you touch the screen when the navigation system is in standby mode, it reverts to the original screen.

Also, if you press the **MAP** button, the standby mode is cancelled and the current location screen is displayed. If you press the **MODE** button, the standby mode is cancelled and the AV source screen is displayed.

- ☐ When the navigation system is in standby mode, the navigation guidance does not output the voice guidance. The audio sound is output.
- ☐ The standby mode is not cancelled by turning ignition switch on or off. ☐

How to use the navigation menu screens



① Top Menu

This is the starting menu to access the desired screens and operate various functions. You can also check or cancel your set route from this menu.

□ If you press the **HOME** button, the screen of either “Top Menu” or Shortcut Menu which was being displayed last time is displayed.

□ [Apps] is only available when an iPhone or a smartphone is connected to this navigation system.

② Shortcut Menu

□ If you press the **HOME** button, the screen of either “Top Menu” or Shortcut

Menu which was being displayed last time is displayed.

③ AV operation screen

This is the screen that normally appears when you play the AV source.

④ Map screen

You can use this screen to check the current vehicle position information and route to the destination.

⑤ Edit/Settings screen

You can access the screen to customise settings.

⑥ AppRadio Mode screen

Basic operation

In this manual, the application menu screen and the application operation screen are collectively referred to as the “AppRadio Mode screen”.

⑦ Application menu screen

This navigation system can switch to the application menu, which you can display and operate the application for the iPhone or smartphone on the screen.

⑧ Application operation screen

You can control the iPhone or smartphone applications directly on the navigation screen.

⑨ Information screen

You can access the screen for handling various information such as the system information of the device.

⑩ Editing route screen

You can edit the conditions for calculating the current route.

⑪ Destination screen

You can search for your destination on this menu.

⑫ Phone screen

You can access the screen that is related to hands-free phoning. 

Shortcut Menu

Registering your favourite menu items in shortcuts allows you to quickly jump to the registered menu screen by a simple touch on the Shortcut Menu screen.

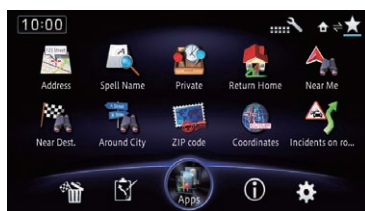
Selecting the shortcut

- ☐ Up to 10 menu items can be registered in shortcuts.

1 Display the Shortcut Menu screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch .



The Shortcut selection screen appears.

3 Touch the tab or touch or to display the icon that you want to set to shortcut.

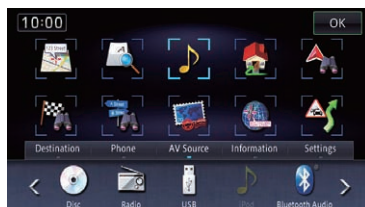


Tabs

4 Touch and hold the icon that you want to add to shortcut.

5 Move the icon to the upper side of the screen, and then release it.

The selected item is added to shortcut.



Removing a shortcut

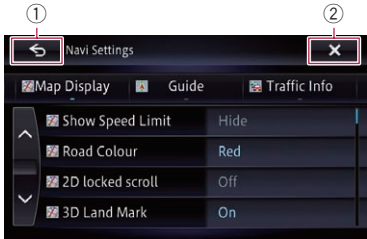
1 Touch and hold the icon of the shortcut you want to remove.

2 Move the icon to the lower side of the screen, and then release it. .

Using the touch panel

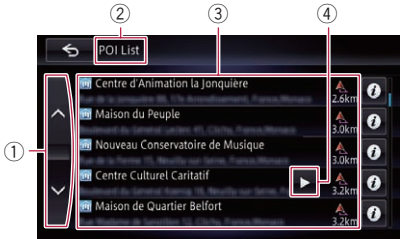
You can operate the product by touching the marks and items (touch panel keys) displayed on the screen directly with your fingers.

Using the common touch panel keys



- ① The previous screen returns.
- ② The screen is closed.

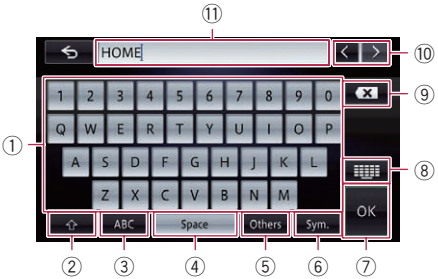
Operating list screens (e.g. POI list)



- ① Touching or on the scroll bar scrolls through the list and allows you to view the remaining items.
- ② **Screen title**
- ③ **Listed items**
Touching an item on the list allows you to narrow down the options and proceed to the next operation.
- ④ If not all the characters can be displayed within the displayed area, touching the key to the

right of the item allows you to see the remaining characters.

Operating the on-screen keyboard



- ① **Keyboard**
Touching the keys enters the characters in the text box.
- ② You can switch between capital and lower case letters.
- ③ **ABC**
You can enter letters and numbers.
- ④ **Space**
You can leave spaces.
A space equivalent to the number of touches is inserted.
- ⑤ **Others**
You can enter other characters of alphabet.
☐ Even if you use any of “A”, “Ä”, “Å”, “Æ”, the displayed result is the same.
- ⑥ **Sym.**
You can enter text with marks such as “&”, “+”, or numbers.
- ⑦ **OK**
Confirms the entry and allows you to proceed to the next step.
- ⑧ Switches the on-screen keyboard layout.
- ⑨ Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the key deletes all of the text.

Basic operation

⑩ < >

Allows you to move the cursor to the right or left for a number of characters equivalent to the number of touches.

⑪ Text box

Displays the characters that are entered. If there is no text in the box, an informative guide with text appears. 

Swipe action

You can operate some navigation and audio functions by sliding your fingers vertically and horizontally while touching the screen.

1 Touch and hold the swipe response area.

- ☐ The swipe response area varies depending on the displayed screen.

Example: CD



Swipe response area



Operation guide

The operation guide appears.

2 While touching the screen, slide your finger toward the function you want to execute and release.



The selected function is zoomed in and the function operates.

Swipe action list

Navigation

Operation screen	Action
	← Displays the turning direction at the next guide point and the distance, and gives a voice announcement.
Guidance display	→ Cancels the display of the intersection guide map.
	↑ Hides the street list.
	↓ Displays the next guidance point.
The route alternatives function taking into account traffic jams and closed/blocked roads	→ Selects an alternative route.
	← Selects the current route.
App view map	← Displays the turning direction at the next guide point and the distance, and gives a voice announcement.
	↑ The sound mix function is disabled.
	↓ The sound mix function is enabled.
	● (*1) Displays the "AppRadio Mode" screen.

(*1) Displays this screen after releasing your finger from the circle.

- The intersection guidance display and the interchange guidance display

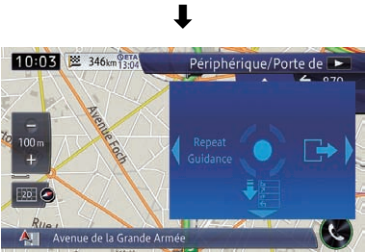


Swipe response area

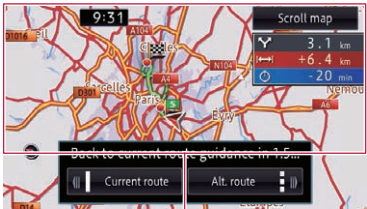
The other guidance displays



Swipe response area



- The route alternatives function taking into account traffic jams and closed/blocked roads



Swipe response area



Basic operation

Audio

Operation screen	Action
Radio (FM, MW/LW)	← Skips to the previous preset channel.
	→ Skips to the next preset channel.
	↑ Unmutes the sound.
	↓ Mutes the sound.
	← Skips to the previous preset channel.
Digital Radio (DAB) (*1)	→ Skips to the next preset channel.
	↑ Unmutes the sound.
	↓ Mutes the sound.
	← Skips to the previous track.
Disc (CD, CD-R, CD-RW)/Bluetooth Audio	→ Skips to the next track.
	↑ Unmutes the sound.
	↓ Mutes the sound.
	← Skips to the previous chapter.
Disc (DVD-Video)	→ Skips to the next chapter.
	↑ Unmutes the sound.
	↓ Mutes the sound.
	← Skips to the previous file.
Disc (DivX video files)/SD/USB	→ Skips to the next file.
	↑ Unmutes the sound.
	↓ Mutes the sound.
	← Skips to the previous chapter or song.
iPod	→ Skips to the next chapter or song.
	↑ Unmutes the sound.
	↓ Mutes the sound.

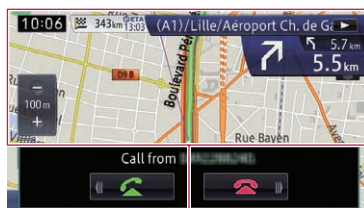
Operation screen	Action
Aha Radio	← Skips to the previous content.
	→ Skips to the next content.
	↑ Unmutes the sound.
	↓ Mutes the sound.

(*1) A source only available on AVIC-F950DAB.

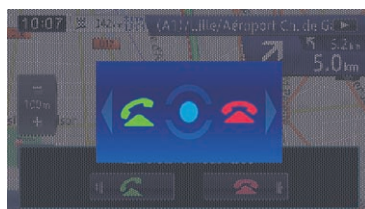
Hands-free phoning

Operation screen	Action
Receiving a phone call	← Allows you to talk on the phone.
	→ Ends the call.

- Receiving a phone call



Swipe response area



Most of the information provided by your navigation system can be seen on the map. You need to become familiar with how information appears on the map.

How to read the map screen

This example shows an example of a 2D map screen.



- ❑ Information with an asterisk (*) appears only when the route is set.

- ❑ Depending on the conditions and settings, some items may not be displayed.

① Current time

② Scale display touch panel key

Touching [+] or [-] changes the map scale. You can change the map scale between 10 metres and 2 000 kilometres (10 yards and 1 000 miles).

- ❑ The “-” mark shown below indicates the scale distance (2D display only).

③ Map control

The “View” screen that can set the view mode and the map orientation appears.

- ➞ For details of the operation, refer to *Switching the view mode* on page 34.
- ➞ For details, refer to *Switching the map orientation* on page 34.

④ Current position

Indicates the current location of your vehicle. The apex of the triangular mark indicates your orientation and the display moves automatically as you drive.

- ❑ The apex of the triangular mark is the actual current position of the vehicle.

⑤ Information bar

Each touch of this key changes the display information as follows.

- The information of where your vehicle is travelling along
 - ❑ When “Street Name” is selected on “Current location info.” of “Navi Settings”, the street name or city name is displayed. Also, “Coordinates” is selected, latitude and longitude are displayed.
 - ➞ For details, refer to *Setting the current street name display* on page 139.

How to use the map

- ☐ When there is no data of current position, no information is displayed.
- The AV source currently selected
 - ☐ Depending on the source currently chosen, an image is displayed.
- ⑥ **Phone key**
Displays the "Phone" screen.
➞ For details, refer to *Displaying the phone menu* on page 67.
- ⑦ **Direction line***
The direction towards your destination (next waypoint, or the position of a cursor) is indicated with a straight line.
- ⑧ **Current route***
The route currently set is highlighted in colour on the map. If a waypoint is set on the route, the route after the next waypoint is highlighted in another colour.
- ⑨ **Next direction of travel***
As you get closer to the guidance point, the colour of the item changes to green.
- ⑩ **Distance to the guidance point***
Shows the distance to the next guidance point.
- ⑪ **Second manoeuvre arrow***
Shows the turning direction after the next guidance point and the distance to it.
- ⑫ **Number and name of the street to be used (or next guidance point)***
Displays the number and name of the upcoming street. If you touch , the street name is scrolled and hidden letters appear.
- ⑬ **Estimated time of arrival at your destination or waypoint***
The estimated time of arrival is an ideal value calculated based on the value set for **Minor Ordinary Road**, **Major Ordinary Road** or **Motorway**, and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time.
➞ For details, refer to *Changing the virtual speed of the vehicle* on page 142.
- ⑭ **Distance to the destination (or distance to waypoint)***

Meaning of guidance flags

Icon	Meaning
	Destination The chequered flag indicates your destination.
	Waypoint The red flags indicate your waypoints.
	Guidance point The next guidance point (next turning point, etc.) is shown by an orange flag.

Enlarged map of the intersection

When "Close Up View" in the "Guide" screen is "On", an enlarged map of the intersection appears.



- ➞ For details, refer to *Setting the auto-zoom display* on page 142.
- ☐ When the enlarged map of roundabout appears, the exit numbers are displayed on each exit. The voice guidance is announced from the entrance to the exit.

The display while driving on the motorway

In certain locations of the motorway, lane information is available. The map indicates the recommended lane to be in to easily manoeuvre the next guidance.



While driving on the motorway, motorway exit numbers and motorway signs may be displayed in the vicinity of interchanges and exits.



① Lane information

- **Green lane:**

Guided lane

- **Green lane with a white arrow:**

Recommended lane

- **Grey lane:**

Non guided lane

- ☐ On the toll roads, the lanes are in blue instead of green.

② Motorway exit information

Displays the motorway exit.

③ Motorway signs

These show the road number and give directional information.

④ Distance to the next guidance point

These show the distance to the next guidance point.

- ☐ If the data for these items is not contained in the built-in memory, the information is

not available even if there are signs on the actual road. ☐

Types of the road stored in the map database

Roads included in the route guidance

Turn-by-turn routable roads contain full attribute data and can be used for full route guidance. Pioneer navigation will display full route guidance, including turn-by-turn voice directions and arrow icons.

Roads without turn-by-turn instructions

Routable roads (the route displayed and highlighted in pink) have only basic data and can only be used to plot a navigable route. Pioneer navigation will display full route guidance, including turn-by-turn voice directions and arrow icons. Please review and obey all local traffic rules along the highlighted route for your safety.

No turn-by-turn directions will be displayed on these roads.

Non-routable roads (light grey-colour roads)

Map display is possible, but cannot be used for route calculation. Please review and obey all local traffic rules along this route. (For your safety.) ☐

Operating the map screen

Scrolling the map to the position you want to see

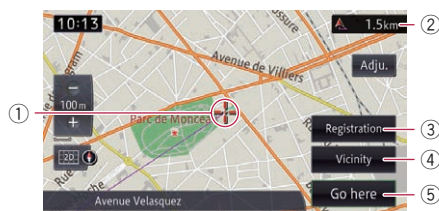
1 Display the map screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch and hold the map in the desired direction to see.

The map moves centred around the position you have touched.

How to use the map



- ① Cursor
- ② Distance from the current position
- ③ **Registration**
You can register the location indicated by the current cursor position as "Favourites".
➡ For details, refer to *Registering and editing locations* on page 52.
- ④ **Vicinity**
You can search for the POIs near the cursor position by selecting a category.
➡ For details, refer to *Searching for a nearby POI* on page 42.
- ⑤ **Go here**
You can search for a route to a destination indicated by the cursor position.
➡ For details, refer to *Setting a route to your destination* on page 46.

3 To slightly adjust the position, touch [Adju.] first, then the direction arrow (eight directions) in which you want to make slight adjustments.



Each touch of the direction arrow moves the map little by little.

The direction arrows disappear by touching [Adju.] again.

- ❑ Pressing the **MAP** button returns the map to the current position.

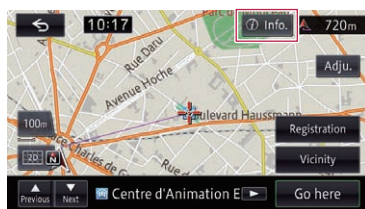
Viewing information about a specified location

For the locations you have searched using the destination menu, you can display the detailed information as long as the information related to the location is stored in the system.

1 Search for a location using the "Destination" screen.

- ➡ For details, refer to Chapter 4.

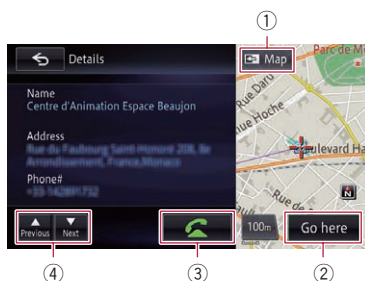
2 Touch [Info].



The "Details" screen appears.

3 Touch the item that you want to check the detailed information.

The information for the specified location appears.



The information shown varies according to the location. (There may be no information for that location.)

- ① **Map**
Displays the map screen.

- ② **Go here**
Searches for the route to the displayed location.

- ❑ If the route is already set, the displayed location can be modified to the destination or a waypoint.



- ③ Enables you to call the position if a telephone number is available. (Pairing with mobile phone featuring Bluetooth wireless technology is required.)



- ④ The previous facility or the next facility appears when searching for a POI.

Switching the view mode

Various types of screen displays can be selected for navigation guidance.

1 Display the map screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch on the map screen.

The “View” screen appears.

3 Touch the type that you want to set.

You can select the following types:

- **2D View** (default):
Displays a normal map (2D map).



- **3D View:**

Displays a map with an aerial view (3D map).



- **App view:**

Displays the screen of an application for the iPhone or smartphone on the right side

of the screen and the map on the left side of the screen.

If you touch the map, the map is scrolled on the whole screen. And if you touch the screen of an application for the iPhone or smartphone, the **AppRadio Mode** screen appears.

- ➔ For details, refer to *Scrolling the map to the position you want to see* on page 32.
- ➔ For details, refer to *Swipe action* on page 27.



- **Rear View:**

Displays the rear view image on the right side of the screen and the map on the left side of the screen.



- ❑ This mode is available when the rear view camera setting is set to “On”.
- ➔ For details, refer to *Setting for rear view camera* on page 161.

Switching the map orientation

You can switch how the map shows your vehicle's direction between “**Heading up**” and “**North up**”.

- **Heading up:**

The map display always shows the vehicle's direction as proceeding toward the top of the screen.

How to use the map

When “**Heading up**” is selected,  is displayed.

- **North up:**

The map display always has north at the top of the screen.

When “**North up**” is selected,  is displayed.

- ☐ The red arrow indicates north.
- ☐ The map orientation is fixed at “**North up**” when the map scale is 50 kilometres (25 miles) or more.
- ☐ The map orientation is fixed at “**Heading up**” when the 3D map screen is displayed.
- ☐ The map orientation is fixed at “**North up**”, when the current position is displayed regardless of whether the 2D map screen is displayed or the 3D map is displayed.

- 1 **Display the “View” screen.**

- For details of the operation, refer to *Switching the view mode* on page 34.

- 2 **Touch [Map orientation] to switch the vehicle's direction.**

Each time you touch the key the setting changes. .

Displaying one-way street marks

You can display one-way street marks.

- ☐ You can turn on or off the one-way street display on the 100 metres (0.1 mile) scale.

- 1 **Display the “View” screen.**

- For details of the operation, refer to *Switching the view mode* on page 34.

- 2 **Touch [1-way; at 100m].**

Each touch of the key turns on or off the one-way street display on the 100 metres (0.1 mile) scale. .

Displaying POI on the map

Displays icons for the surrounding facilities (POI) on the map.

- ☐ POI icons are not displayed when the map scale is 1 kilometre (0.75 mile) or more.

- ☐ Up to 200 items or 100 preinstalled POIs are displayed on the map.

Displaying preinstalled POIs on the map

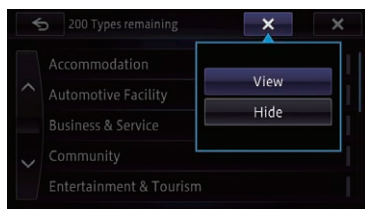
- ☐ You can select up to 200 items from the subcategories or detailed categories.

- 1 **Display the “View” screen.**

- For details of the operation, refer to *Switching the view mode* on page 34.

- 2 **Touch [Overlay POI].**

- 3 **Touch [Hide], and then touch [View].**



- ☐ If you do not want to display the POI icon on the map, touch [Hide]. (Even if “Hide” is selected, the POI selection setting is retained.)

- If you touch , the pop-up menu is disappeared.

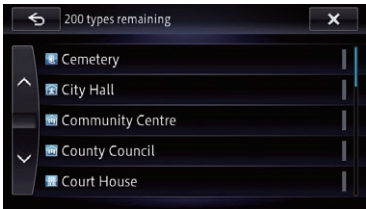
- 4 **Touch the main category you want.**



A list of subcategories under the selected main category appears.

- ☐ If you touch the item, the indicator on the right of the list turns on and show that the item is selected. If you touch the same item, the indicator turns off and the selection is cancelled.

5 Touch the subcategory to display.



The indicator of the selected POI lights up and you can continue to select the POI.

- ❑ The indicator also lights up when several POI are selected. Touching the facility again turns off the indicator and deselects the POI.
- ❑ To select another POI, touch  to return to the Step 2 screen and repeat Step 2 and 3.

6 Touch .

The screen returns to the map screen and the logo of the selected POI appears. .

Registering a scale

You can register a scale for each map according to the display method. You can see the map in the registered scale by pressing the **MAP** button even if you switch the view mode.

1 Adjust the map scale to the scale you want to register.

2 Display the “View” screen.

- ➞ For details of the operation, refer to *Switching the view mode* on page 34.

3 Touch [Save scale].

A confirmation message appears.

4 Touch [Yes].

The registration is complete. .

Searching for and selecting a location

CAUTION

For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the handbrake before setting your route.

- ❑ Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided applies for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

The basic flow of creating your route

- 1 Park your vehicle in a safe place and apply the handbrake.
- ↓
- 2 Display the "**Destination**" screen.
 - ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.
- ↓
- 3 Select the method of searching for your destination.
- ↓
- 4 Enter the information about your destination to calculate the route.
- ↓
- 5 Confirm the location on the map.
 - ➡ For details, refer to *Setting a route to your destination* on page 46.
- ↓
- 6 The navigation system calculates the route to your destination, and then shows the route on the map.
- ↓
- 7 Check and decide the route.
 - ➡ For details, refer to *Setting a route to your destination* on page 46.
- ↓
- 8 Your navigation system sets the route to your destination, and a map of your surroundings appears.
- ↓
- 9 Release the handbrake, and drive in accordance with the navigation guidance.



Searching for a location by address

The most frequently used function is “**Address**”, in which the address is specified and the destination is searched. You can select the method of searching for a location by address.

- Searching for a street name first
- Searching for a city name first
- Finding the location by specifying the post-code

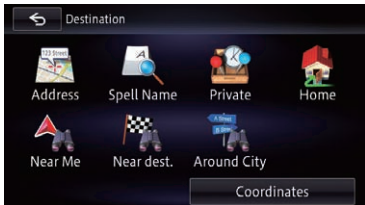
Searching for a street name first

- ❑ Depending on the search results, some steps may be skipped.
- ❑ When you enter characters, the system will automatically search the database for all possible options. Only the characters you enter are active.
- ❑ If the search candidates number reaches 20 or less, the screen automatically changes to the search result screen.

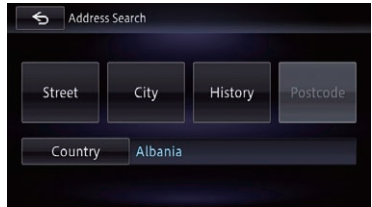
1 Display the “Destination” screen.

➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Address].



3 Touch [Country].

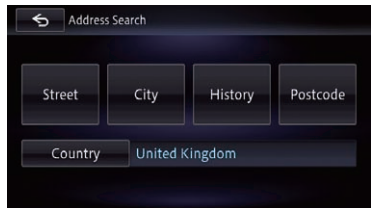


4 Touch one of the items on the list to set the country as a search area.



The screen returns to the previous screen.

5 Touch [Street].



6 Enter the street name and then touch [OK].



The “**Select a street**” screen appears.

7 Touch the street you want.

Searching for and selecting a location

8 Enter the city name and then touch [OK].



The "Select City" screen appears.

9 Touch the desired city name.

- If you touch , the geographic centre of the city appears on the map screen.

10 Enter the house number and then touch [OK].



The "House number selection" screen appears.

- If you touch [OK] without entering the house number, a representative location on the street in the selected city appears.

11 Touch the desired house number range.

The searched location appears on the map screen.

- ➔ For subsequent operations, refer to *Setting a route to your destination* on page 46.

Searching for a city name first

- ❑ Depending on the search results, some steps may be skipped.
- ❑ When you enter characters, the system will automatically search the database for all possible options. Only the characters you enter are active.

- ❑ If the search candidates number reaches 20 or less, the screen automatically changes to the search result screen.

1 Display the "Destination" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Address].

The "Address Search" screen appears.

3 Touch [City].

- If you touch [History], the "City History List" screen appears, enabling you to search by previously selected city history.
- ➔ For details, refer to *Searching by selected city history* on page 41.

4 Enter the city name and then touch [OK].



The "Select City" screen appears.

5 Touch the desired city name.

- If you touch , the geographic centre of the city appears on the map screen.

6 Enter the street name and then touch [OK].



The "Select a street" screen appears.

Searching for and selecting a location

7 Touch the street you want.

8 Enter the house number and then touch [OK].



The “House number selection” screen appears.

- If you touch [OK] without entering the house number, a representative location on the street in the selected city appears.

9 Touch the desired house number range.

The searched location appears on the map screen.

➞ For subsequent operations, refer to *Setting a route to your destination* on page 46.

Finding your destination by specifying the postcode

If you know the postcode of your destination, you can use it to find your destination.

❑ Depending on the search results, some steps may be skipped.

1 Display the “Destination” screen.

➞ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Address].

The “Address Search” screen appears.

3 Touch the key next to “Country” to display the country list.

4 Touch one of the items on the list to set the country as a search area.

The screen returns to the previous screen.

5 Touch [Postcode].

The “Enter Postcode” screen appears.

6 Input the postcode.



A list of cities with the specified postcode is shown (except for the following cases).

British postcode:

The searched location appears on the map screen.

Netherlands postcode:

If you input a partial postcode (4 digits) or a complete postcode (6 digits), and touch [OK], a list of cities is shown.

7 Touch the city or area where your destination is located.

- If you touch , the geographic centre of the city appears on the map screen.

8 Enter the street name and then touch [OK].

The “Select a street” screen appears.

- ❑ If there is no house number, the searched location appears on the map screen.

9 Touch the street you want.

The “Enter House Number” screen appears.

- ❑ If the selected street has only one matching location, the searched location appears on the map screen.

10 Enter the house number and then touch [OK].

The “House number selection” screen appears.

- If you touch [OK] without entering the house number, a representative location on the street in the selected city appears.

Searching for and selecting a location

11 Touch the desired house number range.

The searched location appears on the map screen.

- For subsequent operations, refer to *Setting a route to your destination* on page 46.

Searching by selected city history

You can search cities from the history that you have searched by entering the name with the keyboard and selected by **"Address"**.

- ☐ The history can store up to 100 cities.
- ☐ The cities are listed in order of the most recent search.

1 Display the "Destination" screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Address].

The **"Address Search"** screen appears.

3 Touch [History].

The **"City History List"** screen appears.

4 Touch the desired city name.

- If you touch , the geographic centre of the city appears on the map screen.

5 Enter the street name and then touch [OK].

The **"Select a street"** screen appears.

6 Touch the street you want.

The **"Enter House Number"** screen appears.

- ☐ If the selected street has only one matching location, the searched location appears on the map screen.

7 Enter the house number and then touch [OK].

The **"House number selection"** screen appears.

- If you touch [OK] without entering the house number, a representative location on the street in the selected city appears.

8 Touch the desired house number range.

The searched location appears on the map screen.

- For subsequent operations, refer to *Setting a route to your destination* on page 46. 

Setting up a route to your home

If your home location is stored, the route to your home can be calculated by touching a single key.

1 Display the "Destination" screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Home].

- ☐ If you have not registered your home location, a message appears. Touch [Yes] to start registration.
- For details, refer to *Registering your home* on page 133. 

Searching for Points of Interest (POI)

Information about various facilities (Points Of Interest – POI), such as petrol stations, car parks or restaurants, is available. You can search for a POI by selecting the category (or entering the POI Name).

Searching for a POI directly from the name of the facilities

- ☐ If the search candidates number reaches 20 or less, the screen automatically changes to the search result screen.

1 Display the "Destination" screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [POI Name].

The “**Spell name**” screen appears.

3 Touch [Name].

▪ If you change the country to search, touch **[Country]** and display the “**Country List**” screen to configure.

- ❑ Once the country has been selected, you only have to change countries when your destination is outside the country you selected.

4 Enter the POI name and then touch [OK].

The “**POI List**” screen appears.

5 Touch the POI you want.

The searched location appears on the map screen.

- If you touch **[Sort]**, the order of POI can be sorted.
 - ❑ The current order is indicated on the upper right of the screen.
 - **By distance:**
Sorts the items in the list in order by distance from the vehicle position.
 - **By coincidence:**
Sorts the items in the list in order by degree of consistency with the entered text.
 - **By name:**
Sorts the items in the list alphabetically, and the list display can be switched by switching the alphabet tabs.
- ➔ For subsequent operations, refer to *Setting a route to your destination* on page 46.

Searching for a nearby POI

You can search for POIs in your surroundings.

- ❑ Up to 50 POIs within a 160-kilometre (100-mile) radius of the vehicle position are listed in order by distance.

1 Display the “Destination” screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Near Me].

POIs are divided into several categories.

- ❑ The “**Category history**” screen appears if you have searched for POIs before.
- ❑ The history can be stored up to 10 genres. You can delete the stored histories collectively.
- ❑ If you want to delete the histories, touch **[Delete All]**.
- ❑ If you want to search for a genre other than displayed, touch **[Other]**. The POI list is displayed.

3 Touch the category you want.

The “**POI List**” screen appears.

- ❑ If there are more detailed categories within the selected category, repeat this step as frequently as necessary.

4 Touch the POI you want.

The searched location appears on the map screen.

- ➔ For subsequent operations, refer to *Setting a route to your destination* on page 46.

Searching for POIs around the destination

- ❑ This function is available when the route is set.

1 Display the “Destination” screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Near dest.].

POIs are divided into several categories.

- ❑ The “**Category history**” screen appears if you have searched for POIs before.
- ❑ The history can be stored up to 10 genres. You can delete the stored histories collectively.
- ❑ If you want to delete the histories, touch **[Delete All]**.
- ❑ If you want to search for a genre other than displayed, touch **[Other]**. The POI list is displayed.

Searching for and selecting a location

3 Touch the category you want.

The "POI List" screen appears.

- ❑ If there are more detailed categories within the selected category, repeat this step as frequently as necessary.

4 Touch the POI you want.

The searched location appears on the map screen.

- ➡ For subsequent operations, refer to *Setting a route to your destination* on page 46.

Searching for POIs around the city

You can search for POIs around a specified city.

- ❑ If the search candidates number reaches 20 or less, the screen automatically changes to the search result screen.

1 Display the "Destination" screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Around City].

The "Around City" screen appears.

3 Touch [Country].

The "Country List" screen appears.

4 Touch one of the items on the list to set the country as a search area.

The screen returns to the previous screen.

5 Touch [City].

■ If you touch [History], the "City History List" screen appears, enabling you to search by previously selected city history.

- ➡ For details, refer to *Searching by selected city history* on page 41.

6 Enter the city name and then touch [OK].

The "Select City" screen appears.

7 Touch the desired city name.

POIs are divided into several categories.

- ❑ The "Category history" screen appears if you have searched for POIs before.
- ❑ The history can be stored up to 10 genres. You can delete the stored histories collectively.
- ❑ If you want to delete the histories, touch [Delete All].
- ❑ If you want to search for a genre other than displayed, touch [Other]. The POI list is displayed.
- If you touch , the geographic centre of the city appears on the map screen.

8 Touch the category you want.

The "POI List" screen appears.

- ❑ If there are more detailed categories within the selected category, repeat this step as frequently as necessary.

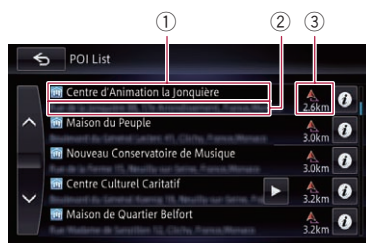
9 Touch the POI you want.

The searched location appears on the map screen.

- ➡ For subsequent operations, refer to *Setting a route to your destination* on page 46.

How to read the "POI List" screen

The following information is displayed on the "POI List" screen.



- ① Facility name
- ② Facility address
- ③ Distance from the position that the search starts
- ❑ If you touch , detailed information of the facility appears.

Deleting the icons displayed after searching for a nearby POI

After searching for a nearby POI, the icons of nearby facilities appear on the map. The following operation shows how to delete the icons.

1 Display the “View” screen.

- ➔ For details of the operation, refer to *Switching the view mode* on page 34.

2 Touch [Del. search results].

All displayed icons are deleted. ☐

Selecting destination from stored locations

Storing locations you visit frequently saves time and effort.

Selecting an item from the list provides an easy way to specify the position.

- ☐ This function is not available if no locations have been registered in “**Stored**”.

- ➔ For details, refer to *Storing favourite locations* on page 52.

1 Display the “Destination” screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Stored].

A list of registered locations appears.

3 Touch the entry you want.

The searched location appears on the map screen.

- ➔ For subsequent operations, refer to *Setting a route to your destination* on page 46.

You can switch the list display between “**Favourites**” and “**History**” by touching the tabs.



- If you touch [Sort], you can sort the entry by following order.
 - **By date** (default):
Sorts the list in chronological order of registration or call up.
 - **By distance**:
Sorts the list in order by distance from the vehicle position.
 - **By name**:
Sorts the list alphabetically. ☐

Selecting a location you searched for recently

The places that you set as destinations or waypoints previously are automatically stored in “**History**”.

- ☐ If no location is stored in Destination History, you cannot select [History]. (If you perform a route calculation, you can select [History].)
- ☐ “**History**” can store up to 100 locations. If the entries reach the maximum, any further entry will overwrite the oldest one.

1 Display the “Destination” screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Stored].

3 Touch [History].

A list of locations where you have selected appears.

Searching for and selecting a location

4 Touch the entry you want.



The searched location appears on the map screen.

- ➔ For subsequent operations, refer to *Setting a route to your destination* on page 46. ■

Searching for a location by coordinates

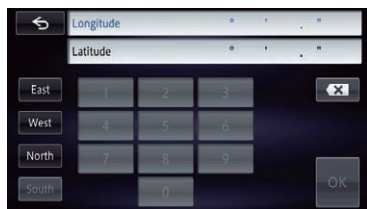
Entering a latitude and longitude pinpoints the location.

1 Display the "Destination" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Coordinates].

3 Touch [East] or [West], and then enter the longitude.



To enter W 50°1'2.5" for example, touch **[West]**, [0], [5], [0], [0], [1], [0], [2], and [5].

4 Touch [North] or [South], and then enter the latitude.

To enter N 5°1'2.5" for example, touch **[North]**, [0], [5], [0], [1], [0], [2], and [5].

5 Touch [OK].

The searched location appears on the map screen.

- ➔ For subsequent operations, refer to *Setting a route to your destination* on page 46. ■

Setting a route to your destination

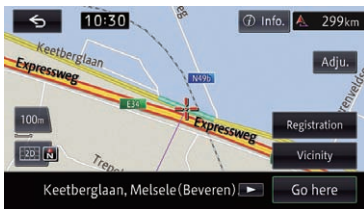
1 Search for a location.

- ➔ For details, refer to Chapter 4.

After searching for the destination, the Location confirmation screen appears.

2 Touch [Go here].

Location confirmation screen

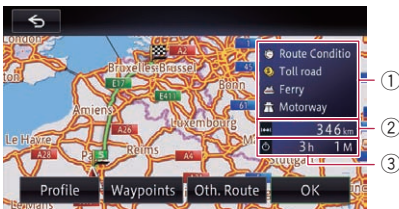


The destination is set, and then the route calculation starts.

When the route calculation is completed, the Route confirmation screen appears.

- ❑ If you press the **MAP** button during route calculation, the calculation is cancelled and the map screen appears.
- ❑ If the route is already set, the screen for asking whether the searched location becomes the destination or a waypoint appears. If you touch **[Destination]**, the current destination is deleted and the route to a new destination is searched.
If you touch **[Waypoint]**, the route for stopping by the searched location on the way to the same destination is searched.

Route confirmation screen



- ① Route calculation condition
- ② Distance to the destination
- ③ Travel time to your destination

- If you touch **[Profile]**, the "Route Profile" screen appears.
 - ➔ For details, refer to *Checking the current itinerary* on page 47.
- If you touch **[Waypoints]**, the "Waypoints List" screen appears.
 - ➔ For details, refer to *Editing waypoints* on page 49.
- When there are multiple routes following a search, **[Oth. route]** appears.
If you touch **[Oth. route]**, you can select a route with conditions that may differ from those of the currently selected route.
 - ➔ For details, refer to *Displaying multiple routes* on page 46.

When there is only one route, **[Route map]** appears.

If you touch **[Route map]**, the entire route is displayed on one screen.

- ❑ On the route map screen, you can scroll the map or change its scale.
 - ➔ For details, refer to *Scrolling the map to the position you want to see* on page 32.
 - ➔ For details, refer to *How to read the map screen* on page 30.
- If you touch **[Cancel]**, a message confirming whether to cancel the calculated route appears. If you touch **[Yes]**, the calculated route is cancelled and the map screen appears.

3 Touch [OK].

The displayed route is set as your selected route, and route guidance starts.

Displaying multiple routes

You can select a desired route from multiple route options.

- ❑ If you set waypoints, you cannot display multiple routes.

1 Touch [Oth. route] on the Route confirmation screen.

Multiple route options appear.

2 Touch 1 to 6.

Another route is displayed.

3 Touch [OK].

The displayed route is set as your selected route, and route guidance starts. ■

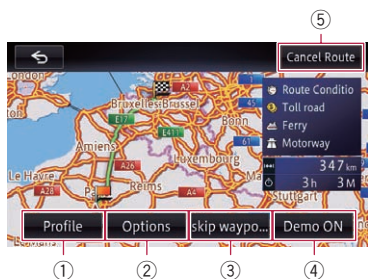
Checking and modifying the current route

Displaying the route overview

- ❑ The route overview is only active when the route is set.

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.



① Profile

You can confirm the set route.

- ➔ For details, refer to *Checking the current itinerary* on page 47.

② Options

You can add a waypoint along the route and set the route which passes through it. You can also change search criteria.

- ➔ For details, refer to *Modifying the route calculation conditions* on page 48.
- ➔ For details, refer to *Editing waypoints* on page 49.

③ skip waypt.

If you no longer need to stop by the registered waypoint, you can search a route again by supposing that you have already passed the waypoint.

- ➔ For details, refer to *Skipping a waypoint* on page 50.

④ Demo ON

You can confirm the route from the demonstration of the driving of the route from the starting point and final destination.

- ➔ For details, refer to *Using the demonstration guidance* on page 50.

Demo OFF

While the demonstration guidance is running, [Demo OFF] appears. Touching the key finishes the demonstration guidance.

⑤ Cancel Route

You can delete the current route.

- ➔ For details, refer to *Cancelling the route guidance* on page 51.

2 Touch the item that you want to re-fine. ❑

Checking the current itinerary

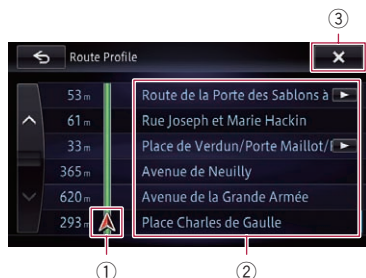
You can check the route details.

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Profile].

The "Route Profile" screen appears.



① Current position

② Guidance point

③ X

The screen is closed.

- ❑ When you display the "Route Profile" screen by touching [Profile] on the Route confirmation screen, [OK] appears.

Touching this key starts the route guidance on the displayed route. ❑

Modifying the route calculation conditions

You can modify the conditions for route calculation and recalculate the current route.

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Options], and then touch [Route Options].



The “Route Options” screen appears.

- If you touch **X**, the pop-up menu is disappeared.

3 Touch the desired items to change the route calculation conditions and then touch [OK].



The route is recalculated, and the Route confirmation screen appears.

Items that users can operate

Settings marked with an asterisk (*) are default or factory settings.

Route Condition

This setting controls how the route should be calculated by taking into account the time, distance or main road.

Determines which condition takes priority for route calculation.

Fast*:

Calculates a route with the shortest travel time to your destination as a priority.

Short:

Calculates a route with the shortest distance to your destination as a priority.

Main Road:

Calculates a route that passes major arterial roads as a priority.

Toll road

This setting controls whether toll roads (including toll areas) should be taken into account.

Use*:

Calculates a route that may include toll roads (including toll areas).

Avoid:

Calculates a route that avoids toll roads (including toll areas).

- ☐ The system may calculate a route that includes toll roads even if “**Avoid**” is selected.

Ferry

This setting controls whether ferry crossings should be taken into account.

Use*:

Calculates a route that may include ferries.

Avoid:

Calculates a route that avoids ferries.

- ☐ The system may calculate a route that includes ferries even if “**Avoid**” is selected.

Motorway

This setting controls whether motorways may be included in the route calculation.

Use*:

Calculates a route that may include motorways.

Avoid:

Checking and modifying the current route

Calculates a route that avoids motorways.

- ❑ The system may calculate a route that includes motorways even if “Avoid” is selected. ❑

Editing waypoints

You can edit waypoints (locations you want to visit on the way to your destination) and recalculate the route so that it passes through these locations.

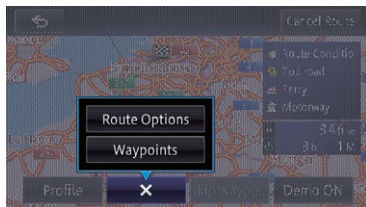
Adding a waypoint

- ❑ Up to five waypoints can be set.

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Options], and then touch [Waypoints].



The “Waypoints List” screen appears.

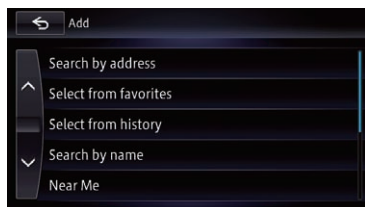
- If you touch **X**, the pop-up menu is disappeared.

3 Touch [Add].



The “Add” screen appears.

4 Search for a location.



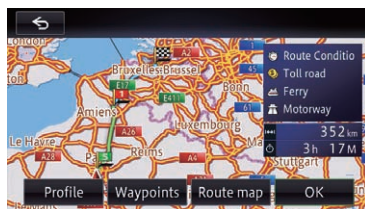
- ➔ For details, refer to Chapter 4.

5 Touch [OK] on the “Waypoints List” screen.



The route is recalculated, and the Route confirmation screen appears.

6 Touch [OK].



A map of the current position appears.

- ❑ If you set waypoints, you cannot display multiple routes.

Deleting a waypoint

You can delete waypoints from the route and then recalculate the route. (You can delete successive waypoints.)

Checking and modifying the current route

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Options], and then touch [Waypoints].

The “Waypoints List” screen appears.

3 Touch [Delete].

The “Delete” screen appears.

4 Select the waypoint that you want to delete.

A tick mark appears next to the selected waypoint.

5 Touch [Delete].

A message confirming whether to delete the waypoint appears.

6 Touch [Yes].

The selected waypoint will be deleted from the list.

7 Touch [OK] on the “Waypoints List” screen.

The route is recalculated, and the Route confirmation screen appears.

8 Touch [OK].

A map of the current position appears.

Sorting waypoints

You can sort waypoints and recalculate the route.

- ☐ You cannot sort waypoints that you have already passed.

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Options], and then touch [Waypoints].

The “Waypoints List” screen appears.

3 Touch [Sort], and then touch [Manual].

You can specify the order of waypoints to sort.

- If you touch [Automatic], the waypoints are sorted in the order of the nearest one from the current location.

4 Touch the waypoint or destination.



Put them in the desired order.

5 Touch [OK].

The “Waypoints List” screen appears.

6 Touch [OK] on the “Waypoints List” screen.

The route is recalculated, and the Route confirmation screen appears.

7 Touch [OK].

A map of the current position appears. ☐

Skipping a waypoint

1 Display the editing route screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [skip waypt.].

The next waypoint is considered to have already been passed through, and a route is searched. ☐

Using the demonstration guidance

You can confirm the route by making the navigation system run to the destination from the point of departure on screen.

Checking and modifying the current route

- ☐ The demonstration is repeated, but finishes in the following cases:

- When starting actual driving
- When searching a route
- When deleting route
- When is touched [**Demo OFF**].

1 Display the editing route screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Demo ON].

3 Display the map screen.

The demonstration guidance will begin.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Cancel Route].

A message confirming the cancellation of the current route appears.

3 Touch [Yes].

The current route is deleted, and a map of your surroundings reappears.

- ☐ You can also cancel the route by touching  on the "Top Menu" screen. ☐

Finishing the demonstration guidance

1 Display the editing route screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Demo OFF].

The demonstration guidance is finished.

- ☐ You can also finish the demonstration guidance by touching **Demo..** and then touching [**Yes**] while the demonstration guidance is running. ☐

Cancelling the route guidance

If you no longer need to travel to your destination, follow the steps below to cancel the route guidance.

1 Display the editing route screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

Registering and editing locations

Storing favourite locations

Storing your favourite locations as "**Favourites**" lets you save the time and effort of re-entering this information. Stored items can be made available on "**Favourites**" later.

"**Favourites**" can store up to 400 locations. Home location is counted as one of the items in "**Favourites**".

1 Search for a location.

- ➔ For details about the search methods, refer to Chapter 4.

2 When the map of the location you want to register is displayed, touch [Registration].

The location is registered, the location name input screen appears.

- ➔ For details, refer to *Editing registered locations* on page 52.

3 Touch [OK].

The registration is complete.

Editing registered locations

1 Display the "Edit/Settings" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Edit Data].

The "**Edit Data**" screen appears.

3 Touch [Edit favorite].

The "**Edit Favourite**" screen appears.

4 Touch [Edit].

The "**Edit Favourite**" screen appears.

- ☐ Home location is displayed on the top of the list.

5 Touch the location that you want to edit.

6 Touch the item you want to configure.



① Name

You can enter the desired name.

- ☐ Up to 40 characters can be input for the name.

② Phone#

You can edit the registered phone number. The maximum digits you can enter for the phone number is 24.

③ Icon

You can change the symbol displayed on the map and the "**Edit Favourite**" screen.

④ Sound effects

You can edit the sound effects of registered locations.

⑤ Change position

You can change the registered location by scrolling the map.

7 Touch [X].

The registration is complete.

Deleting a favourite location from the list

1 Display the "Edit/Settings" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Edit Data].

The "**Edit Data**" screen appears.

3 Touch [Edit favorite].

The "**Edit Favourite**" screen appears.

Editing the data on the use of navigation function

- 4 Touch [Delete].
- 5 Select the location you want to delete.



A tick mark appears next to the selected location.

- If you touch [All], you can select all entries. If you want to deselect all entries, touch [None].

- 6 Touch [Delete].



A message will appear asking you to confirm the deletion.

- 7 Touch [Yes].



The data you selected is deleted.

- If you touch [No], the deletion is cancelled.

Deleting the destination history from the list

Items in "History" can be deleted. All entries in "History" can be deleted collectively.

- 1 Display the "Edit/Settings" screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

- 2 Touch [Edit Data].

The "Edit Data" screen appears.

- 3 Touch [Delete search history].

The "History" screen appears.

- 4 Select the location you want to delete.



A tick mark appears next to the selected location.

- If you touch [All], you can select all entries. If you want to deselect all entries, touch [None].

- 5 Touch [Delete].



A message will appear asking you to confirm the deletion.

- 6 Touch [Yes].

The data you selected is deleted.

- If you touch [No], the deletion is cancelled. □

Deleting learned routes

The device learns the streets you often use, and the learned streets are preferentially used during a route search. To change a frequently used street, delete the learned route and let the device learn it again.

- ❑ Please note that all the learned routes will be deleted.

1 Display the “Edit/Settings” screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Edit Data].

The “**Edit Data**” screen appears.

3 Touch [Delete learned routes].

A confirmation message appears.

4 Touch [Yes].

Deletes the learned routes. ☐

Deleting track logs

You can delete track logs displayed on the map screen.

- ❑ You can also automatically delete track logs.

1 Display the “Edit/Settings” screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Edit Data].

The “**Edit Data**” screen appears.

3 Touch [Delete travel log].

A confirmation message appears.

4 Touch [Yes].

Deletes the track log. ☐

Using traffic information

You can check real-time traffic information transmitted by the Traffic Message Channel (TMC) of the FM Radio Data System (RDS) on screen. The traffic information is updated periodically. When the navigation system receives updated traffic information, the navigation system will show it on map and display detailed text information when available. When you receive information concerning traffic incidents on your route, the system will suggest another route to avoid traffic jams.

- ❑ The system acquires the traffic information within a radius of up to 150 km from the vehicle position. (If there is a lot of traffic information around your vehicle, the radius will be shorter than 150 km.)
- ❑ The navigation system provides the following functions by using the information from RDS-TMC service:
 - Displaying a list of traffic information
 - Displaying traffic information on a map
 - Suggesting a route to avoid traffic jams by using traffic information
- ❑ The term “traffic jam” in this section refers to the following types of traffic information: slow and queuing traffic, stationary traffic and closed/blocked roads. This information is always taken into consideration when checking your route, and the information related to these events cannot be turned off.

Checking all traffic information

Traffic information is displayed on a screen in the form of a list. This allows you to check how many traffic incidents have occurred, their location and their distance from your current position.

1 Display the “Information” screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Traffic Information].

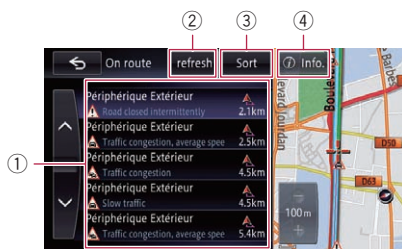
The “Traffic information menu” screen appears.

3 Touch [Nearby incidents].

The “Nearby” screen appears.

A list with received traffic information is shown.

4 Select an incident you want to view in detail.



① Listed items

The details of the selected incident are displayed.

② Refresh

If you touch [Refresh] while new traffic information is received, the current information is updated and old information is removed. The traffic information list is updated to reflect the new situation.

③ Sort

Touching the key displays the following pop-up menu to sort the traffic information.

• By distance:

You can sort traffic information by distance from your current position.

When you touch [Nearby incidents], the list displayed will be sorted according to the linear distance from the vehicle position to the traffic information.

When you touch [Traffic on route], the list displayed will be sorted according to the distance from the vehicle position to the traffic information.

• By name:

You can sort the traffic information in alphabetical order.

- **By event:**

You can sort the traffic information according to the incident.

The list will be sorted in the order of closed/blocked roads, traffic jams, accidents, road works and others.

④ **Info.**

The details of the selected incident are displayed.

5 Touch .

The previous screen returns. .

Checking traffic information on the route

All traffic information on the current route is displayed on screen in a list.

1 Display the “Information” screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Traffic Information].

The “**Traffic information menu**” screen appears.

3 Touch [Traffic on route].

The “**On route**” screen appears.

The method for checking the content displayed on the screen is the same as “**Nearby**” screen.

- ➔ For details, refer to *Checking all traffic information* on page 55. .

How to read traffic information on the map

The traffic event information displayed on the map is as follows.

-  A line is displayed only when the map scale is 5 km (2.5 miles) or lower.
-  Icons appear only when the scale on the map is 20 km (10 miles) or lower. If the

scale is changed, the icons are resized according to the selected scale.

Traffic event icon



-  with yellow line:
Slow and queuing traffic
-  with red line:
Stationary traffic
-  with black line:
Closed/blocked roads
-  etc.:
Accidents, constructions, etc. .

Setting an alternative route to avoid traffic jams

If the navigation system detects any traffic jams on your current route, the system tries to find a better route in the background.

-  This function is available when both “**Traffic avoidance**” and “**Auto reroute**” are set to “**On**”.
 - ➔ For details, refer to *Setting the route alternatives function to avoid traffic jams and closed/blocked roads* on page 141.
-  The following types of traffic incidents on the route will be checked for: slow, queuing and stationary traffic, and closed/blocked roads except for closed motorway exits/entrances.

Using traffic information

Checking for traffic jams automatically

If there is information about traffic jams on your current route and if an alternative route can be found, the navigation system will recommend a new alternative route automatically. In such a case, the following screen will appear.



- ① Distance from the current position of your vehicle to the point of entry into the new route.
 - ② Difference in distance between the existing route and new route.
 - ③ Difference in travel time between the existing route and new route.
- ❑ No action is taken if the system cannot find any traffic jam information on your route or cannot find an alternative.

● Touch [Alt. route].

The recommended route is set as your route, and the route guidance starts.

- ❑ When no selection is made, the recommended route or the current route will be automatically selected according to the settings. And the route guidance starts.
- For details, refer to *Setting to select your route automatically using the route alternatives function* on page 141.
- If you touch [**Current route**] while the recommended route is displayed, the screen switches to the current route displayed, and route guidance starts.
- If you touch [**Scroll map**], you can switch the map scale or the map orientation and confirm the route. ❑

Selecting the preferred RDS-TMC service provider manually

A default preferred TMC service provider for each country has been set. The navigation system tunes to the radio station with good reception among the preferred RDS-TMC service providers. If you want to set another preferred RDS-TMC service provider, you can manually select one from the available RDS-TMC service providers.

1 Display the "Information" screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Traffic Information].

The "Traffic information menu" screen appears.

3 Touch [TMC Provider Selection].

4 Touch the desired service provider on the list.

After touching a service provider, the system starts tuning to the selected RDS-TMC service provider. When the tuning is successful, the system returns to the map display. ❑

Registering and connecting a Bluetooth device

If your devices feature Bluetooth® technology, this navigation system can be connected to your devices wirelessly. This section describes how to set up a Bluetooth connection.

For details about the connectivity with the devices featuring Bluetooth wireless technology, refer to the information on our website.

Preparing communication devices

This navigation system has a built-in function to use devices featuring Bluetooth wireless technology.

➔ For details, refer to *Notes for hands-free phoning* on page 75.

You can register and use devices that feature the following profiles with this navigation system.

- HFP (Hands-Free Profile)
 - A2DP (Advanced Audio Distribution Profile)
 - SPP (Serial Port Profile)
- ❑ When the navigation system is turned off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously-connected device. Even when the connection is severed for some reason, the system automatically reconnects the specified device (except when the connection is severed due to device operation). ❑

Registering your Bluetooth devices

You need to register your devices featuring Bluetooth wireless technology when you connect it for the first time. A total of 5 devices can be registered. Two registration methods are available:

- Searching for nearby Bluetooth devices

- Pairing from your Bluetooth devices
- ❑ If you try to register more than 5 devices, the system will ask you to select one of the registered devices to delete.
- ➔ For details, refer to *Deleting a registered device* on page 65.

Searching for nearby Bluetooth devices

The system searches for available Bluetooth devices near the navigation system, displays them in a list, and registers them for connection.

For iPod with 30-pin connector users

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the "Phone" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch [Bluetooth Settings].

The "Bluetooth Settings" screen appears.

4 Touch [Registration].

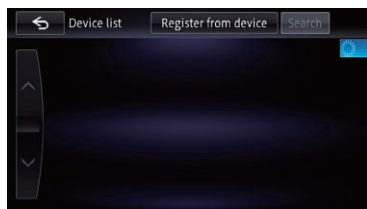
The "Device list" screen appears.

The system searches for Bluetooth devices waiting for the connection and displays them in the list if a device is found.

- ❑ Up to 10 devices will be listed in the order that the devices are found.

Registering and connecting a Bluetooth device

5 Wait until your Bluetooth device appears in the list.



- If you cannot find the Bluetooth device that you want to connect, check that the device is waiting for the Bluetooth wireless technology connection.

6 Touch the Bluetooth device name you want to register.



- If you touch **[Search]**, the system starts searching for Bluetooth devices waiting for connection, and displays them in the list format when any devices are detected.

7 Pair this navigation system with your Bluetooth device.

When the Bluetooth device connects to this product for the first time, a pairing operation is needed to specify the device to connect. How the pairing is performed varies depend-

ing on the Bluetooth device. Perform pairing according to the screen instructions for this product or Bluetooth device. Refer to the instruction manual of your devices to register (registration and authentication of device). After registering, a confirmation message appears.

8 Touch **[OK]**.

The registration is complete, and the device is connected as a hands-free phone. You can perform the following setting depending on the Bluetooth device registered.

- **Transferring the phone book**

You can transfer the phone book to the navigation system if the registered Bluetooth device features PBAP (Phone Book Access Profile).

If you touch **[Yes]**, you can transfer the whole phone book to the navigation system, and then the message that transfer is finished appears.

- **Selecting whether to use the Bluetooth audio**

You can select whether to use the Bluetooth audio function if the registered Bluetooth device features Bluetooth audio.

The message **"Is this Android?"** appears.

9 Touch **[No]**.

The message **"Is this device equipped with a Digital AV Connector?"** appears.

10 Touch **[No]**.

The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

For iPod with Lightning connector users

- ❑ Only the iPod with Lightning connector can perform the iPhone cooperation function (**AppRadio Mode** and **aha**) via Bluetooth wireless technology.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the “Phone” screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch [Bluetooth Settings].

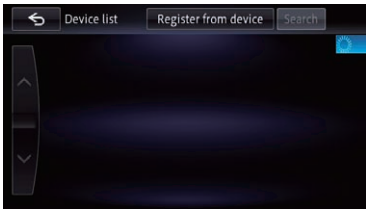
The “**Bluetooth Settings**” screen appears.

4 Touch [Registration].

The “**Device list**” screen appears.
The system searches for Bluetooth devices waiting for the connection and displays them in the list if a device is found.

- ❑ Up to 10 devices will be listed in the order that the devices are found.

5 Wait until your Bluetooth device appears in the list.



- ❑ If you cannot find the Bluetooth device that you want to connect, check that the device is waiting for the Bluetooth wireless technology connection.

6 Touch the Bluetooth device name you want to register.



- If you touch **[Search]**, the system starts searching for Bluetooth devices waiting for connection, and displays them in the list format when any devices are detected.

7 Pair this navigation system with your Bluetooth device.

When the Bluetooth device connects to this product for the first time, a pairing operation is needed to specify the device to connect. How the pairing is performed varies depending on the Bluetooth device. Perform pairing according to the screen instructions for this product or Bluetooth device. Refer to the instruction manual of your devices to register (registration and authentication of device). After registering, a confirmation message appears.

8 Touch [OK].

The registration is complete, and the device is connected as a hands-free phone. You can perform the following setting depending on the Bluetooth device registered.

Registering and connecting a Bluetooth device

• Transferring the phone book

You can transfer the phone book to the navigation system if the registered Bluetooth device features PBAP (Phone Book Access Profile).

If you touch **[Yes]**, you can transfer the whole phone book to the navigation system, and then the message that transfer is finished appears.

• Selecting whether to use the Bluetooth audio

You can select whether to use the Bluetooth audio function if the registered Bluetooth device features Bluetooth audio.

The message **"Is this Android?"** appears.

9 Touch **[No]**.

The message **"Is this device equipped with a Digital AV Connector?"** appears.

10 Touch **[Yes]**.

The message **"Do you want to set this device for the AppRadio Mode?"** appears.

11 Touch **[Yes]** if you use the AppRadio Mode with a device you registered.

- **Yes:**
Allows you to proceed to the next step.
- **No:**
The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

12 Touch **[OK]**.

For Bluetooth device (other than iPod) users

- ☐ Only the Android device can perform the smartphone cooperation function (**AppRadio Mode** and **aha**) via Bluetooth wireless technology.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless

technology. For details, refer to the instruction manual of your devices.

2 Display the **"Phone"** screen.

- ☐ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch **[Bluetooth Settings]**.

The **"Bluetooth Settings"** screen appears.

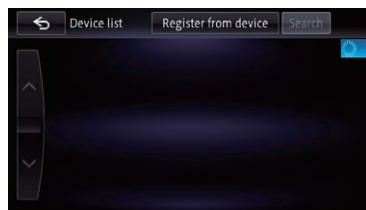
4 Touch **[Registration]**.

The **"Device list"** screen appears.

The system searches for Bluetooth devices waiting for the connection and displays them in the list if a device is found.

- ☐ Up to 10 devices will be listed in the order that the devices are found.

5 Wait until your Bluetooth device appears in the list.



- ☐ If you cannot find the Bluetooth device that you want to connect, check that the device is waiting for the Bluetooth wireless technology connection.

6 Touch the Bluetooth device name you want to register.



- If you touch **[Search]**, the system starts searching for Bluetooth devices waiting for connection, and displays them in the list format when any devices are detected.

7 Pair this navigation system with your Bluetooth device.

When the Bluetooth device connects to this product for the first time, a pairing operation is needed to specify the device to connect. How the pairing is performed varies depending on the Bluetooth device. Perform pairing according to the screen instructions for this product or Bluetooth device. Refer to the instruction manual of your devices to register (registration and authentication of device). After registering, a confirmation message appears.

8 Touch **[OK]**.

The registration is complete, and the device is connected as a hands-free phone.

You can perform the following setting depending on the Bluetooth device registered.

- **Transferring the phone book**

You can transfer the phone book to the navigation system if the registered Bluetooth device features PBAP (Phone Book Access Profile).

If you touch **[Yes]**, you can transfer the whole phone book to the navigation system, and then the message that transfer is finished appears.

- **Selecting whether to use the Bluetooth audio**

You can select whether to use the Bluetooth audio function if the registered Bluetooth device features Bluetooth audio.

The message **"Is this Android?"** appears.

9 Touch **[Yes]** if the Bluetooth device you connected is an Android device.

- **Yes:**

Allows you to proceed to the next step.

- **No:**

The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

- ☐ Only the Android device can perform the smartphone cooperation function (**AppRadio Mode** and **aha**) via Bluetooth wireless technology.

The message **"Do you want to set this device for the AppRadio Mode?"** appears.

10 Touch **[Yes]** if you use the AppRadio Mode with a device you registered.

- **Yes:**

Allows you to proceed to the next step.

- **No:**

The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

11 Touch **[OK]**.

Pairing from your Bluetooth devices

You can register the Bluetooth device by setting the navigation system to standby mode and requesting connection from the Bluetooth device.

Registering and connecting a Bluetooth device

For iPod with 30-pin connector users

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the "Phone" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch [Bluetooth Settings].

The "Bluetooth Settings" screen appears.

4 Touch [Registration].

The "Device list" screen appears.

5 Touch [Register from device].

The navigation system waits for a Bluetooth wireless technology connection.

6 Register the navigation system on your Bluetooth device.

If your device asks you to enter a password, enter the password of the navigation system. When the device is successfully registered, the connection settings are made from the device.

- ❑ If registration fails, repeat the procedure from the beginning.

7 Touch [OK].

The registration is complete, and the device is connected as a hands-free phone.

You can perform the following setting depending on the Bluetooth device registered.

• Transferring the phone book

You can transfer the phone book to the navigation system if the registered Bluetooth device features PBAP (Phone Book Access Profile).

If you touch [Yes], you can transfer the whole phone book to the navigation system, and then the message that transfer is finished appears.

• Selecting whether to use the Bluetooth audio

You can select whether to use the Bluetooth audio function if the registered Bluetooth device features Bluetooth audio.

The message "Is this Android?" appears.

8 Touch [No].

The message "Is this device equipped with a Digital AV Connector?" appears.

9 Touch [No].

The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

For iPod with Lightning connector users

- ❑ Only the iPod with Lightning connector can perform the iPhone cooperation function (AppRadio Mode and aha) via Bluetooth wireless technology.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the "Phone" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch [Bluetooth Settings].

The "Bluetooth Settings" screen appears.

4 Touch [Registration].

The "Device list" screen appears.

5 Touch [Register from device].

The navigation system waits for a Bluetooth wireless technology connection.

6 Register the navigation system on your Bluetooth device.

If your device asks you to enter a password, enter the password of the navigation system. When the device is successfully registered, the connection settings are made from the device.

- ❑ If registration fails, repeat the procedure from the beginning.

7 Touch [OK].

The registration is complete, and the device is connected as a hands-free phone.

You can perform the following setting depending on the Bluetooth device registered.

- **Transferring the phone book**

You can transfer the phone book to the navigation system if the registered Bluetooth device features PBAP (Phone Book Access Profile).

If you touch **[Yes]**, you can transfer the whole phone book to the navigation system, and then the message that transfer is finished appears.

- **Selecting whether to use the Bluetooth audio**

You can select whether to use the Bluetooth audio function if the registered Bluetooth device features Bluetooth audio.

The message **"Is this Android?"** appears.

8 Touch [No].

The message **"Do you want to set this device for the AppRadio Mode?"** appears.

9 Touch [Yes].

The message **"Do you want to set this device for the AppRadio Mode?"** appears.

10 Touch [Yes] if you use the AppRadio Mode with a device you registered.

- **Yes:**
Allows you to proceed to the next step.
- **No:**
The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

11 Touch [OK].

For Bluetooth device (other than iPod) users

- ☐ Only the Android device can perform the smartphone cooperation function (**AppRadio Mode** and **aha**) via Bluetooth wireless technology.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the "Phone" screen.

- For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch [Bluetooth Settings].

The **"Bluetooth Settings"** screen appears.

4 Touch [Registration].

The **"Device list"** screen appears.

5 Touch [Register from device].

The navigation system waits for a Bluetooth wireless technology connection.

6 Register the navigation system on your Bluetooth device.

If your device asks you to enter a password, enter the password of the navigation system. When the device is successfully registered, the connection settings are made from the device.

- ☐ If registration fails, repeat the procedure from the beginning.

7 Touch [OK].

The registration is complete, and the device is connected as a hands-free phone.

You can perform the following setting depending on the Bluetooth device registered.

- **Transferring the phone book**

You can transfer the phone book to the navigation system if the registered Bluetooth device features PBAP (Phone Book Access Profile).

If you touch **[Yes]**, you can transfer the whole phone book to the navigation system, and then the message that transfer is finished appears.

- **Selecting whether to use the Bluetooth audio**

You can select whether to use the Bluetooth audio function if the registered Bluetooth device features Bluetooth audio.

The message **"Is this Android?"** appears.

8 Touch [Yes] if the Bluetooth device you connected is an Android device.

- **Yes:**
Allows you to proceed to the next step.
- **No:**

Registering and connecting a Bluetooth device

The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

The message **“Do you want to set this device for the AppRadio Mode?”** appears.

9 Touch [Yes] if you use the AppRadio Mode with a device you registered.

- **Yes:**
Allows you to proceed to the next step.
- **No:**
The device is registered in the navigation system. After the device is successfully registered, the Bluetooth connection is established from the navigation system.

10 Touch [OK].

Deleting a registered device

When you have already registered 5 Bluetooth devices and you want to add another, you must first delete one of the registered devices.

- ❑ If a registered phone is deleted, all the phone book entries and call history lists that correspond to the phone will be also cleared.

1 Display the “Phone” screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

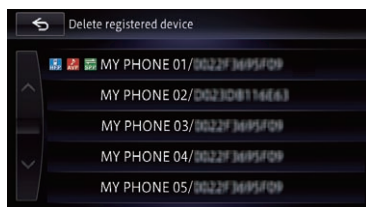
2 Touch [Bluetooth Settings].

The **“Bluetooth Settings”** screen appears.

3 Touch [Delete device].

The **“Delete registered device”** screen appears.

4 Touch the Bluetooth device name that you want to delete.



A message prompting you to delete a registered device appears.

5 Touch [Yes].

The device is deleted.

- ❑ If the device you deleted was set for the priority connecting as a hands-free phone, Bluetooth audio player or smartphone, this navigation system needs to set another device for priority connecting. ❑

Connecting a registered Bluetooth device manually

The navigation system automatically connects the Bluetooth device selected as the target of connection. However, connect the Bluetooth device manually in the following cases:

- Two or more Bluetooth devices are registered, and you want to manually select the device to be used.
- You want to reconnect a disconnected Bluetooth device.
- Connection cannot be established automatically for some reason.

If you start connection manually, carry out the following procedure. You can also connect the Bluetooth device by having the navigation system detect it automatically.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific-action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the “Phone” screen.

- ➡ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

3 Touch [Bluetooth Settings].

The **“Bluetooth Settings”** screen appears.

4 Touch [Change device].

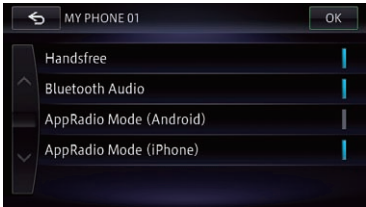
The **“Change Bluetooth device”** screen appears.

Registering and connecting a Bluetooth device

5 Touch the name of the device that you want to connect.



6 Touch the profile that you want to connect.



You can select the following profiles:

- **Handsfree:**
Connects the device as a hands-free phone.
- **Bluetooth Audio:**
Connects the device as a Bluetooth audio player.
- **AppRadio Mode (Android):**
Connects the device as a smartphone (Android device) in **AppRadio Mode**.
- **AppRadio Mode (iPhone):**
Connects the device as an iPod with Lightning connector in **AppRadio Mode**.

7 Touch [OK].

Connection starts.

- ☐ If you select “**AppRadio Mode (Android)**” or “**AppRadio Mode (iPhone)**”, the “**Device Selection for AppRadio Mode**” screen will appear. Please note that depending on “**App connection settings**”, the displayed message will vary.
 - ➔ For details, refer to *Selecting the device connection method* on page 157.
 - ➔ For details, refer to *Setting the iPod connection* on page 149.

When a connection is successfully established, a connection complete message ap-

pears and the map screen returns by touching [OK].

- ☐ To cancel the connection to your device, touch [Cancel].
- ☐ If connection fails, check whether your device is waiting for a connection and then retry.

8 Touch [OK].

Setting for priority connecting

The selected device is set for priority connecting.

And one of the following icons is indicated next to the device name.



Appears when the device is registered so that it will be preferentially paired with the smartphone in **AppRadio Mode**.



Appears when the device is registered so that it will be preferentially paired with the Bluetooth audio connection.



Appears when the device is registered so that it can be preferentially paired with the hands-free connection.



Using hands-free phoning

! CAUTION

For your safety, avoid talking on the phone as much as possible while driving.

If your mobile phone features Bluetooth technology, this navigation system can be connected to your mobile phone wirelessly. Using this hands-free function, you can operate the navigation system to make or receive phone calls. You can also transfer the phone book data stored in your mobile phone to the navigation system. This section describes how to set up a Bluetooth connection and how to operate a mobile phone featuring Bluetooth technology on the navigation system.

For details about the connectivity with the devices featuring Bluetooth wireless technology, refer to the information on our website.

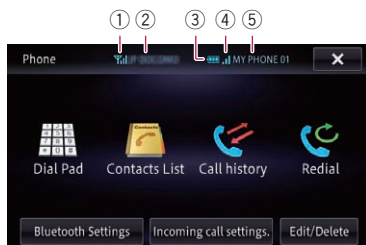
Displaying the phone menu

Use the **"Phone"** if you connect the mobile phone to the navigation system for utilisation.
➔ For details, refer to Chapter 9.

1 Press the HOME button to display the "Top Menu" screen.

2 Touch [Phone].

The **"Phone"** screen appears.



- ① Reception status of the mobile phone
- ② Network name of the mobile phone company
- ③ Battery status of the mobile phone
- ④ Strength of the Bluetooth connection between the navigation system and the device
- ⑤ Name of the connected mobile phone

Making a phone call

You can make a phone call in many different ways.



- ① The call ends.
- ② The hands-free function is turned on or off. If you want to talk on the mobile phone, turn off the hands-free function.
- ③ The dial pad appears.
- ④ You can adjust the volume when talking.
- ⑤ The operation menu during call is minimised.

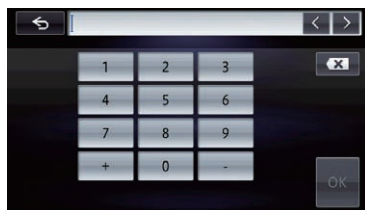
Direct dialling

1 Display the "Phone" screen.

➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Dial Pad].

3 Touch the number keys to enter the phone number.



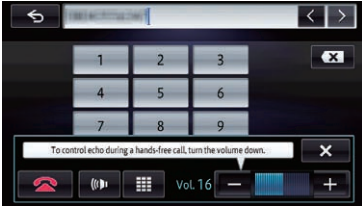
When the input is complete, **[OK]** becomes active.

- If you touch **[X]**, the entered number is deleted one digit at a time from the end of the number. Press and hold to delete all digits.

4 Touch [OK] to make a call.

- ❑ To cancel the call after the system starts dialling, touch **[Cancel]** or .

5 Touch to end the call.



The call ends.

- ❑ You may hear a noise when you hang up the phone.
 - If you touch **[X]**, the operation menu is minimised during the call.
- To display the menu again, touch .



Calling a number in the phone book

You can select and call a contact from the phone book entries transferred to the navigation system.

- ❑ Before using this function, you need to transfer the phone book entries stored in your mobile phone to the navigation system.
- ➔ For details, refer to *Transferring the phone book* on page 71.

Searching for a contact to call on the alphabet tabs

1 Display the “Phone” screen.

- ➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Contacts List].

The “Contacts List” screen appears.

3 Touch alphabet tabs.



The screen jumps to the top of the page displaying the entries that start with the selected letter or number.

- ❑ Touching the alphabet tabs displays all entries that start with symbols.
- ❑ Touching **[Num]** displays all entries that start with numbers.
- ❑ Touching **[Oth.]** displays the page including entries that are not assigned to any of the other tabs.
- If you touch **[Sort]**, the names can be sorted. Each touch of **[Sort]** changes the settings as follows:
 - **First** (default):
Switches the contact entries to first/last name display and sorts the entries by order of first name.
 - **Last**:
Switches the contact entries to last/first name display and sorts the entries by order of last name.
- ❑ Depending on the type of mobile phone, the settings may not be available.

4 Touch the desired name on the list.

5 Touch the desired entry on the list to make a call.

A call confirmation message appears.

6 Touch [Yes].

Dialling starts.

Using hands-free phoning

- ❑ To cancel the call after the system starts dialling, touch **[Cancel]** or .

7 Touch to end the call.

Calling a number by searching by name

You can search by the names registered in the "Contacts List" screen.

1 Display the "Phone" screen.

- ➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch **[Contacts List]**.

The "Contacts List" screen appears.

3 Touch **[Search]**.

4 Enter the desired name and then touch **[OK]**.



The "Contacts Name Search Results" screen appears.

5 Touch the desired name on the list.

6 Touch the desired entry on the list to make a call.

A call confirmation message appears.

7 Touch **[Yes]**.

Dialling starts.

- ❑ To cancel the call after the system starts dialling, touch **[Cancel]** or .

8 Touch to end the call.

Dialling from the history

The most recent calls made (dialled), received and missed are stored in the call history list. You can browse the call history list and call numbers from it.

- ❑ Each call history saves 30 calls per registered mobile phone. If the number of calls exceeds 30, the oldest entry will be deleted.

1 Display the "Phone" screen.

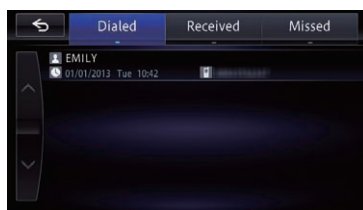
- ➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch **[Call history]**.

3 Touch **[Received]**, **[Dialled]** or **[Missed]**.

The selected call history list appears.

4 Touch an entry on the list.



A call confirmation message appears.

5 Touch **[Yes]**.

Dialling starts.

- ❑ To cancel the call after the system starts dialling, touch **[Cancel]** or .

6 Touch to end the call.

Redialling a call

You can call again to the number that was sent last.

1 Display the "Phone" screen.

- ➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch **[Redial]**.

A call confirmation message is displayed.

3 Touch **[Yes]**.

Dialling starts.

Dialling a favourite location

You can make a call to an entry stored in the "Stored" list.

1 Display the "Destination" screen.

- ➔ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Stored].

3 Touch next to the location that you want to make a call.

The "Details" screen appears.

4 Touch to make a call.

Dialling starts.

- ❑ To cancel the call after the system starts dialling, touch [Cancel] or .

5 Touch to end the call.

Dialling a facility's phone number

You can make a call to facilities with phone number data.

- ❑ You cannot make a call to locations or POIs that have no phone number data.

1 Search for the POI.

The "POI List" screen appears.

- ➔ For details of the operations, refer to *Searching for Points of Interest (POI)* on page 41.

2 Touch next to the POI that you want to call.

The "Details" screen appears.

3 Touch to make a call.

Dialling starts.

- ❑ To cancel the call after the system starts dialling, touch [Cancel] or .

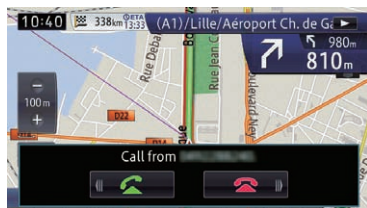
4 Touch to end the call. .

Receiving a phone call

You can perform hands-free answering by using the navigation system.

Answering an incoming call

The system informs you that it is receiving a call by displaying a message and producing a ring sound.



- ❑ You can set the system to automatically answer incoming calls. If not set to automatically answer incoming calls, you will have to answer the calls manually.
 - ➔ For details, refer to *Answering a call automatically* on page 74.
- ❑ If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
 - ➔ For details, refer to *Setting the Volume for Guidance and Phone* on page 135.
- ❑ The registered name appears if the phone number of the received call is already registered in "Contacts List".
- ❑ Depending on the caller ID service, the phone number of the received call may not be displayed. "Call from unknown caller." appears instead.

1 To answer an incoming call, touch .

The operation menu during a call appears.

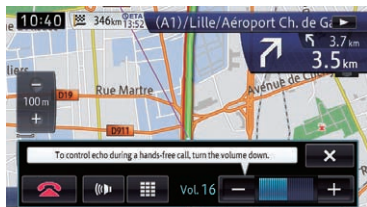
- If you touch , the incoming call is rejected.

The rejected call is recorded in the missed call history list.

- ➔ For details, refer to *Dialling from the history* on page 69.

Using hands-free phoning

2 Touch to end the call.



The call ends.

- ❑ You may hear a noise when you hang up the phone.
- If you touch  or  you can turn on or off the hands-free function. Turn this off if you want to talk on the mobile phone.
- If you touch , you can dial during a call.
- If you touch  or , you can adjust the volume when talking.
- If you touch , the operation menu is minimised during the call.

To display the menu again, touch .



Transferring the phone book

You can transfer the phone book entries from your mobile phone to the phone book of the navigation system.

- ❑ Depending on the mobile phone, the phone book may be called Contacts, Business Card or something else.
- ❑ With some mobile phones, it may not be possible to transfer the entire phone book collectively. In this case, transfer addresses one at a time from your phone book using your mobile phone.

- ❑ If you connect a mobile phone featuring an auto-synchronisation function, the phone book transfer or synchronisation will be automatically performed.
- ❑ A maximum of 1 000 entries can be transferred per mobile phone. If the entries exceed 1 000, the extra entries will not be transferred.
- ❑ Each entry can hold up to 5 phone numbers.
If more than one number is registered for one person, such as work place and home, each number may be counted separately.
- ❑ Depending on the mobile phone that is connected to this navigation system via Bluetooth technology, this navigation system may not be able to display the phone book correctly. (Some characters may be garbled.)
- ❑ If the phone book in the mobile phone contains image data, the phone book may not be correctly transferred.
- ❑ The transferred data cannot be edited on the navigation system.
- ❑ Depending on the mobile phone, phone book transfer may not be available.

1 Connect the mobile phone that has the phone book to transfer.

- For details, refer to *Connecting a registered Bluetooth device manually* on page 65.

2 Touch [Edit/Delete] on the “Phone” screen.

The “Edit/Delete” screen appears.

- For details, refer to *Displaying the phone menu* on page 67.

3 Touch [Contacts].

The “Contacts List” screen appears.

4 Touch [Import].

- ❑ Depending on the mobile phone that is connected to this navigation system via Bluetooth technology, operation needs to be conducted from the mobile phone.
- ❑ If some data has been already retrieved, select either **[Overwrite]** or **[Additional]**.

Depending on the mobile phone, the phone book registered in the navigation system may be automatically overwritten and this step may be skipped.

- **Overwrite:**

The existing data is overwritten, and if the telephone number is added to the mobile phone, it will be transferred anew.

- **Additional:**

If the telephone number is added to the mobile phone, it will be transferred anew.

When data transfer is finished, a message asking whether you want to transfer more data appears.

5 Touch [No].



The transferred data is imported to the navigation system.

When the data has been successfully imported, an import complete message is displayed and the **"Contacts List"** screen appears.

- It may take time depending on how many entries are transferred.
- Touch **[Yes]** to continue the transfer.

Deleting registered contacts

1 Touch [Edit/Delete] on the "Phone" screen.

The **"Edit/Delete"** screen appears.

- ➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Contacts].

The **"Contacts List"** screen appears.

3 Touch [Delete].

The **"Delete"** screen appears.

4 Touch the entry you want to delete.



A tick mark appears next to the entry.

- If you touch **[All]**, you can select all entries. If you want to deselect all entries, touch **[None]**.

5 Touch [Delete].

A message confirming whether to delete the entry appears.

6 Touch [Yes].

The entry is deleted.

- If you touch **[No]**, the deletion is cancelled.

Deleting the history information

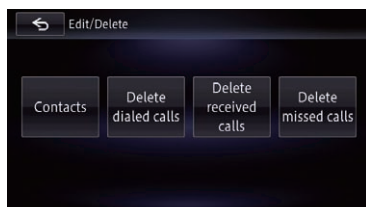
You can clear the memory of each item that corresponds to the connected mobile phone: the outgoing call history, incoming call history or missed call history information.

1 Touch [Edit/Delete] on the "Phone" screen.

The **"Edit/Delete"** screen appears.

- ➔ For details, refer to *Displaying the phone menu* on page 67.

2 Touch the history item you want to delete.



Using hands-free phoning

On this screen, you can select the following items:

- **Delete dialed calls:**
Clears the dialed call history list.
- **Delete received calls:**
Clears the received call history list.
- **Delete missed calls:**
Clears the missed call history list.

3 Touch the history information you want to delete.

The selected history information is tick marked and you can continue to select the history information.

- Touching **[All]** selects all history information. Touching **[None]** deselects all selected history information.

4 Touch [Delete].

A confirmation message appears.

5 Touch [Yes].

Data on the selected item is cleared from this navigation system's memory.

- If you do not want to clear the memory that you have selected, touch **[No]**. 

Changing the phone settings

Editing the device name

You can change the device name to be displayed on your mobile phone. (Default is "PIONEER NAVI".)

1 Display the "Phone" screen.

- For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Bluetooth Settings].

The "Bluetooth Settings" screen appears.

3 Touch [Device Name].

The keyboard to enter the name appears.

4 Touch to delete the current name, and enter the new name using the keyboard.



- ☐ Up to 20 characters can be entered for a device name.

5 Touch [OK].

The name is changed.

Editing the password

You can change the password to be used for authentication on your mobile phone. (Default is "1111".)

- ☐ Four to eight characters can be entered for a password.

1 Display the "Phone" screen.

- For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Bluetooth Settings].

The "Bluetooth Settings" screen appears.

3 Touch [Password].

The password setting screen appears.

4 Touch to delete the current password, and enter the new password using the keyboard.

5 Touch [OK].

The password is changed.

Stopping Bluetooth wave transmission

You can stop transmission of electric waves by turning off the Bluetooth function. If you do not use the Bluetooth wireless technology, we recommend selecting **"Off"**.

1 Display the "Phone" screen.

- For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Bluetooth Settings].

The **"Bluetooth Settings"** screen appears.

3 Touch [Bluetooth On/Off].

Each touch of [Bluetooth On/Off] changes the settings as follows:

- **On** (default):
Turns on the Bluetooth function.
- **Off**:
Turns off the Bluetooth function.

Answering a call automatically

The navigation system automatically answers incoming calls to the mobile phone, so you can answer calls while driving without taking your hands off the steering wheel.

1 Display the "Phone" screen.

- For details, refer to *Displaying the phone menu* on page 67.

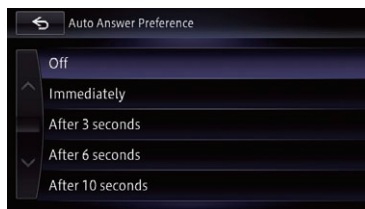
2 Touch [Incoming call settings].

The **"Incoming call settings."** screen appears.

3 Touch [Auto Answer Preference].

The **"Auto Answer Preference"** screen appears.

4 Touch the desired option.



On this screen, you can select the following items:

- **Off** (default):
No automatic response. Respond manually.
- **Immediately**:
Answers immediately.
- **After 3 seconds**:
Answers after three seconds.
- **After 6 seconds**:
Answers after six seconds.
- **After 10 seconds**:
Answers after ten seconds.

Setting the automatic rejection function

If this function is on, the navigation system automatically rejects all incoming calls.

1 Display the "Phone" screen.

- For details, refer to *Displaying the phone menu* on page 67.

2 Touch [Incoming call settings].

The **"Incoming call settings."** screen appears.

3 Touch [Refuse All Calls].

Each touch of [Refuse All Calls] changes the settings as follows:

- **Off** (default):
Accepts all incoming calls.
- **On**:
Rejects all incoming calls.
- ☐ If both **"Refuse All Calls"** and **"Auto Answer Preference"** are activated, **"Refuse All Calls"** takes priority and all incoming calls are automatically rejected.

Using hands-free phoning

- ❑ If “**Refuse All Calls**” is set to “**On**”, rejected incoming calls will not be stored in the missed call list. ❑

Notes for hands-free phoning

General notes

- Connection to all mobile phones featuring Bluetooth wireless technology is not guaranteed.
- The line-of-sight distance between this navigation system and your mobile phone must be 10 metres or less when sending and receiving voice and data via Bluetooth technology. However, the actual transmission distance may be shorter than the estimated distance, depending on the usage environment.
- With some mobile phones, the ring sound may not be output from the speakers.
- If private mode is selected on the mobile phone, hands-free phoning may be disabled.

Registration and connection

- Mobile phone operations vary depending on the type of mobile phone. Refer to the instruction manual that came with your mobile phone for detailed instructions.
- With mobile phones, phone book transfer may not work even though your phone is paired with the navigation system. In that case, disconnect your phone, perform pairing again from your phone to the navigation system, and then perform the phone book transfer.

Making and receiving calls

- You may hear a noise in the following situations:
 - When you answer the phone using the button on the phone.
 - When the person on the other end of line hangs up the phone.
- If the person on the other end of the phone call cannot hear the conversation due to an

echo, decrease the volume level for hands-free phoning. This may reduce the echo.

- With some mobile phones, even if you press the accept button on the mobile phone when a call comes in, hands-free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, only the phone number is displayed.
- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

The received call and the dialled number histories

- You cannot make a call to the entry of an unknown user (no phone number) in the received call history.
- If calls are made by operating your mobile phone, no history data will be recorded in the navigation system.

Phone book transfers

- If there are more than 1 000 phone book entries on your mobile phone, not all entries may download completely.
- With some mobile phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer items one by one from your mobile phone.
- Depending on the mobile phone, this navigation system may not display the phone book correctly. (Some characters may be garbled, or first and last names may be reversed.)
- If the phone book in the mobile phone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the mobile phone.)
- Depending on the mobile phone, phone book transfer may not be available. ❑

This chapter describes the basic operations of the AV source.

You can play or use the following sources with your Pioneer navigation system.

- Radio (FM, MW/LW)
- CD
- ROM (in MP3, AAC, WMA)
- DVD-Video
- DivX
- SD

The following sources can be played back or used by connecting an auxiliary device.

- Digital Radio (DAB) (*1)
 - USB
 - iPod
 - Aha Radio
 - Bluetooth audio
 - AV input 1 (AV1)
 - AV input 2 (AV2)
- ☐ (*1) A source only available on AVIC-F950DAB.

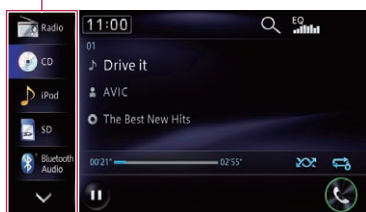
Displaying the AV operation screen

- **Press the MODE button when the map screen is displayed.**

- ☐ The AV operation screen can also be displayed by touching **[AV Source]** on the "Top Menu".

Selecting a source

Source icons



- **Touch the source icon you want to select on the left edge of the screen.**

The operation screen of the selected source appears.

- ☐ If seven or more sources can be selected,  appears.
- ☐ If you touch , the AV source icons will be switched and hidden icons will appear. .

Turning off the AV source

Turn off the AV source to stop playing or receiving the AV source.

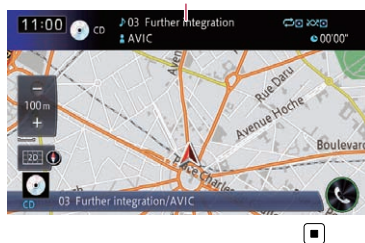
- **Touch [Source Off] on the left edge of the screen.**

The AV source is turned off. .

AV source plate display

If you select a station or song with the track up/down button while the map screen is still displayed, the AV source plate appears on the top of the map screen. The AV source plate displays the status of the currently played AV source. The AV source plate disappears if it is not operated for about four seconds after it appears.

AV source plate



Using the radio

You can listen to the radio using the navigation system. This section describes operations for radio.

The functions related to RDS (Radio Data System) are only available in areas with FM stations broadcasting RDS signals. Even if the navigation system is receiving an RDS station, not all the functions related to RDS will be available.

Starting procedure

1 Display the AV operation screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Touch [Radio] on the left edge of the screen to display the "Radio" screen.

3 Touch the band indicator to switch a band.

- For details, refer to *Using the touch panel keys* on page 78.

4 Use the touch panel keys on the screen to control the radio.

- For details, refer to *Using the touch panel keys* on page 78. 

Reading the screen



① Source icon

Shows which source has been selected.

② Programme service name indicator

Shows the programme service name (station name) of the current station.

- ☐ When "AM" is selected, this indicator is not shown.

③ PTY indicator

Shows the programme type of the current station (when available).

- ☐ When "AM" is selected, this indicator is not shown.

④ Current time

⑤ Band indicator

Shows which band the radio is tuned to: FM1, FM2, FM3 or AM.

⑥ TEXT indicator

Shows when radio text is received.

⑦ TRFC indicator

Shows the status of traffic announcements.

⑧ NEWS indicator

Shows the status of news programmes.

⑨ Preset number indicator

Shows the selected preset item.

⑩ Frequency indicator

⑪ Signal level indicator

⑫ STEREO indicator

Shows that the frequency selected is being broadcast in stereo.

- ☐ When "AM" is selected, this indicator is not shown.

⑬ Radio text display area

Displays the radio text currently received.

- ☐ When "AM" is selected, this indicator is not shown. 

Using the touch panel keys



① Selects a band

Touch the left part to select a FM band (FM1, FM2 or FM3). Touch the right part to switch to the AM band.

- ❑ When "AM" is selected, you cannot switch to another AM band by touching the band key.

② Recalls equaliser curves

➔ For details, refer to *Using the equaliser* on page 151.

③ Displays the "Function" menu

➔ For details, refer to *Using advanced functions* on page 80.

④ Operates some functions by swipe action

➔ For details, refer to *Swipe action* on page 27.

⑤ Displays the "Phone" screen

➔ For details, refer to *Displaying the phone menu* on page 67.

⑥ Displays the radio text screen

Displays the radio text currently received.

- ❑ When "AM" is selected, this indicator is not shown.

➔ For details, refer to *Using radio text* on page 79.

⑦ Stores the strongest broadcast frequencies

➔ For details, refer to *Storing the strongest broadcast frequencies* on page 79.

⑧ Performs manual tuning

To tune manually, touch ◀ or ▶ briefly. The frequencies move up or down one step at a time.

Performs seek tuning

To perform seek tuning, touch and hold ◀ or ▶ for about one second and then release. The

tuner will scan frequencies until it finds a broadcast strong enough for good reception.

- ❑ You can cancel seek tuning by touching either ◀ or ▶ briefly.
- ❑ If you keep holding ◀ or ▶ you can skip broadcasting frequencies. Seek tuning will start when you release the keys.

⑨ Displays preset channels

Touching this key displays the preset channel list.

Touch the item of the list ("1" to "6") to switch to a channel registered as a preset channel.

- ❑ If you touch the preset channel list display key while the preset channel list is displayed, the list disappears and preset tuning keys are displayed.

Preset channel list display key



Preset tuning keys

- Once you have stored broadcast channels, you can easily recall preset channels from memory with a single touch of a key.

➔ For details, refer to *Storing broadcast frequencies* on page 78.

Storing broadcast frequencies

With a touch of any of the preset tuning keys ("1" to "6"), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).

1 Select a frequency that you want to store in memory.

2 Display the preset channel list.

➔ For details, refer to *Displays preset channels* on page 78.

Using the radio

3 Keep touching a preset tuning key [1] to [6].

The selected radio station has been stored in memory.

The next time you touch the same preset tuning key "1" to "6", the radio station frequencies are recalled from memory.

- ❑ Up to 18 FM stations, six for each of the three FM bands, as well as six MW/LW stations, can be stored in memory.

Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys "1" to "6" and, once stored there, you can tune into them with the touch of a key.

- ❑ Storing broadcast frequencies with BSM may replace broadcast frequencies you have already saved.

● Touch [BSM] to begin a search.

A message appears. While the message is displaying, the six strongest broadcast frequencies will be stored under the preset tuning keys "1" to "6" in order of their signal strength. When this is complete, the message disappears.

- If you touch [Cancel], the storage process is cancelled.

Using radio text

- ❑ This function can only be used on the FM band.

This tuner can display radio text data transmitted by RDS stations, such as station information, the title of the currently broadcast song and the name of the artist.

- ❑ The tuner automatically memorises the three latest radio text broadcasts received, replacing text from the least recent reception with new text when it is received.
- ❑ When no radio text is received, "No Text" is displayed.

Viewing the three latest radio text

You can display the currently received radio text and the three most recent radio text transmissions.

1 Display the radio text screen.

- For details, refer to **Displays the radio text screen** on page 78.

2 Press the TRK button.

Pressing the button switches the text contents from the current radio text to the most recent three radio text transmissions.



- ❑ If there is no radio text data in memory, the display will not change.

Storing and recalling radio text

You can store data from up to six radio text transmissions in the touch panel keys "1" to "6".

1 Display the radio text you want to store in memory.

- For details, refer to *Viewing the three latest radio text* on page 79.

2 Touch and hold any of the keys [1] to [6] to store the displayed radio text.

The selected radio text is stored in memory. The next time you press the same keys in the radio text display, the stored text will be recalled from memory.

- ❑ If the radio text data is already stored under all keys, the new text will overwrite the existing one. ■

Using advanced functions

Tuning in strong frequencies

Local seek tuning allows you to only tune into those radio stations with sufficiently strong signals for good reception.

1 Touch on the "Radio" screen.

The "Function" menu appears.

2 Touch [Local].

3 Touch [On] to turn local seek tuning on.

- If you touch [Off], local seek tuning is turned off.

4 Touch or to set the sensitivity.

There are four levels of sensitivity for FM and two levels for MW/LW:

FM: 1 — 2 — 3 — 4

MW/LW: 1 — 2

- The FM "4" (MW/LW "2") setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

Limiting stations to regional programming

- This function can only be used on the FM band.

When AF (alternative frequency) is used to automatically retune frequencies, the regional function limits the selection to stations broadcasting regional programmes.

1 Touch on the "Radio" screen.

The "Function" menu appears.

2 Touch [Regional].

3 Touch [On] or [Off].

- **On** (default):
Turns the **Regional** function on.
- **Off**:
Turns the **Regional** function off.
- Regional programming and regional networks are organised differently depending on the country (i.e. they may change according to the time, country or broadcast area).

- The preset number may disappear on the display if the tuner tunes into a regional station that differs from the originally set station.
- The regional function can be turned on or off independently for each FM band.

Searching for an RDS station by PTY information

- This function can only be used on the FM band.

You can search for general types of broadcasting programmes.

1 Touch on the "Radio" screen.

The "Function" menu appears.

2 Touch [PTY].

3 Touch or to select a programme type.

There are four programme types:

NEWS&INF — Popular — Classics — Others

4 Touch [Start] to begin a search.

The tuner searches for a station broadcasting that programme type.

- If you touch [Stop], the search is cancelled.
- The programmes of some stations may differ from that indicated by the transmitted PTY.
- If no station is broadcasting the type of programme you searched for, "Not Found" is displayed for about two seconds and then the tuner returns to the original station.

Receiving traffic announcements

- This function can only be used on the FM band.

TA (traffic announcement standby) lets you receive traffic announcements automatically, no matter what source you are listening to. TA can be activated for both a TP station (a station that broadcasts traffic information) or another enhanced network's TP station (a station carrying information that cross-references TP stations).

Using the radio

1 Tune into a TP station or another enhanced network's TP station.

2 Touch [TA].

3 Touch [On].

- ☐ To turn traffic announcements standby off, touch [TA] again.

4 Use the VOL (+/-) button to adjust the TA volume when a traffic announcement begins.

The newly set volume is stored in memory and recalled for subsequent traffic announcements.

5 Touch [Cancel] while a traffic announcement is being received to cancel the announcement.

The tuner returns to the original source but remains in standby mode until [TA] is touched again.

You can also cancel the announcement by changing the source or band.

- ☐ The system switches back to the original source following traffic announcement reception.
- ☐ Only TP stations and other enhanced networks' TP stations are tuned in during seek tuning or BSM when the TA function is on.

Using news programme interruption

- ☐ This function can only be used on the FM band.

When a news programme is broadcast from a PTY code news station, the navigation system can switch from any station to the news broadcast station. When the news programme ends, reception of the previous programme resumes.

1 Touch on the "Radio" screen.

The "Function" menu appears.

2 Touch [News].

3 Touch [On] or [Off].

- **Off** (default):
Turns the **News** function off.
- **On**

Turns the **News** function on.

- ☐ A news programme can be cancelled by touching [Cancel].
- ☐ You can also cancel the news programme by changing the source or band.

Tuning into alternative frequencies

- ☐ This function can only be used on the FM band.

If you are listening to a broadcast and the reception becomes weak or there are other problems, the navigation system will automatically search for a different station in the same network that is broadcasting a stronger signal.

1 Touch on the "Radio" screen.

The "Function" menu appears.

2 Touch [AF].

3 Touch [On] or [Off].

- **On** (default):
Turns the **AF** function on.
- **Off**:
Turns the **AF** function off.
- ☐ Only RDS stations are tuned in during seek tuning or BSM when AF is on.
- ☐ When you recall a preset station, the tuner may update the preset station with a new frequency from the station's AF list. No preset number appears on the display if the RDS data for the station received differs from that for the originally stored station.
- ☐ Sound may be temporarily interrupted by another programme during an AF frequency search.
- ☐ AF can be turned on or off independently for each FM band.

PI Seek operation

If the unit fails to find a suitable alternative frequency, or if you are listening to a broadcast and the reception becomes weak, the navigation system will automatically search for a different station with the same programming. During the search, “PI Seek” is displayed and the output is muted. Muting is discontinued after completion of the PI Seek, whether or not a different station is found.

Activating the Auto PI seek for preset stations

When preset stations cannot be recalled, as when travelling long distances, the unit can be set to perform PI Seek during preset recall.

- ❑ The default setting for Auto PI Seek is off.
- ➡ For details, refer to *Switching Auto PI seek* on page 149.

Interruption icon status

- ❑ This function can only be used on the FM band.

When the information interruption setting is enabled, the interruption icon is displayed. The interruption icon display may change depending on the programme reception status.

- ➡ For details of the operation, refer to *Receiving traffic announcements* on page 80.
- ➡ For details of the operations, refer to *Using news programme interruption* on page 81.
- ❑ The interruption icon is displayed on all AV source operation screens.

TRFC indicator

Indicator	Meaning
	Information interruption is activated, but you will not receive data since there is none.
	Information interruption is activated, and data currently being received.
(No display)	Information interruption is deactivated.

NEWS indicator

Indicator	Meaning
	Information interruption is activated, but you will not receive data since there is none.
	Information interruption is activated, and data currently being received.
(No display)	Information interruption is deactivated.

Switching the sound quality of the FM tuner

- ❑ This function can only be used on the FM band.
- You can select the sound quality from the three settings according to the circumstances of use.
- 1 Touch  on the “Radio” screen. The “Function” menu appears.
 - 2 Touch [Tuner Sound]. The “Tuner Sound” menu appears.
 - 3 Touch the item you want to set.
 - **Stable:** Switch to settings that prioritise noise prevention.
 - **Standard:** Switch to the standard settings.
 - **Hi-Fi:** Switch to the settings that gave priority to the sound quality. 

Operating by hardware buttons

Pressing the TRK button

You can move the preset channels up or down.

Pressing and holding the TRK button

You can perform seek tuning. 

Using the Digital Radio (DAB)

- ❑ This function is only available on AVIC-F950DAB.

You can listen to the Digital Audio Broadcasting using the navigation system. This section describes operations for Digital Audio Broadcasting.

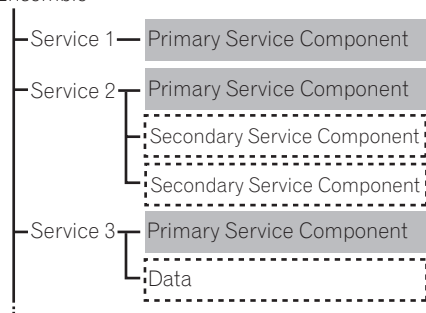
To receive DAB signals, connect a DAB aerial (AN-DAB1) sold separately to the unit.

Digital Radio (DAB) features the following:

- High sound quality (nearly as high as for CDs, although it may be reduced in some cases in order to allow more services to be broadcast)
- Interference-free reception

Some individual services in an ensemble may be further subdivided into Service Components. The main Service Component is called the Primary Service Component, and any auxiliary Service Components are called Secondary Service Components.

Ensemble



■ : Primary data

▤ : Secondary data

Starting procedure

1 Display the AV operation screen.

- ➡ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Touch [Digital Radio] on the left edge of the screen to display the "Digital Radio" screen.

3 Use the touch panel keys on the screen to control the radio.

- ➡ For details, refer to *Using the touch panel keys* on page 84. ❑

Reading the screen



① Source icon

Shows which source has been selected.

② Current time

③ Service component number

④ Band indicator

Shows which band the radio is tuned to: DAB1, DAB2 or DAB3.

⑤ Current broadcast information

- PTY label
- Ensemble label
- Service label
- Service component label

❑ "-----" is displayed if there is no corresponding information.

⑥ Current bit rate

Shows the data volume being received broadcast.

⑦ Frequency indicator

⑧ Preset number indicator

Shows the selected preset item.

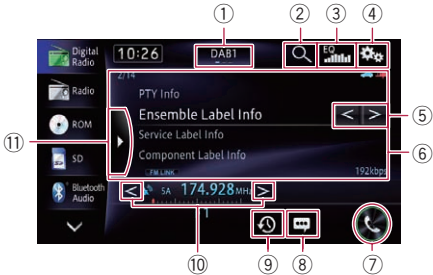
⑨ Channel number indicator

⑩ Signal level indicator

⑪ FM Link indicator

Appears when the navigation system switches to a channel received in good condition automatically from a channel received in bad condition. 

Using the touch panel keys



- ① **Selects a band**
Touch the key repeatedly until the desired band is displayed: **DAB1**, **DAB2**, or **DAB3**.
☐ This function is convenient for preparing different preset lists for each band.
- ② **Selects a channel from the list**
➔ For details, refer to *Selecting a channel from the list* on page 85.
- ③ **Recalls equaliser curves**
➔ For details, refer to *Using the equaliser* on page 151.
- ④ **Displays the "Function" menu**
- ⑤ **Skips the ensemble forward or backward**
- ⑥ **Operates some functions by swipe action**
➔ For details, refer to *Swipe action* on page 27.
- ⑦ **Displays the "Phone" screen**
➔ For details, refer to *Displaying the phone menu* on page 67.
- ⑧ **Displays the radio text screen**
To see text informations of programme currently being listened to, touch this key.
- ⑨ **Listens to recent broadcast**
To play back broadcast the channel currently being listened to, touch this key.
➔ For details, refer to *Listening to a recent broadcast* on page 85.
- ⑩ **Performs manual tuning**

To tune manually, touch  or  briefly. The frequencies move up or down one step at a time.

Performs seek tuning

To perform seek tuning, touch and hold  or  for about one second and then release. The tuner will scan frequencies until it finds a broadcast strong enough for good reception.
☐ You can cancel seek tuning by touching either  or  briefly.

- ⑪ **Recalls channels from the preset**
Touching this key displays the preset channel list.
Touch the item of the list ("1" to "6") to switch to a channel registered as a preset channel.
☐ If you touch the preset channel list display key while the preset channel list is displayed, the list disappears and preset tuning keys are displayed.

Preset channel list display key



Preset tuning keys

- Once you have stored broadcast channels, you can easily recall preset channels from memory with a single touch of a key.
➔ For details, refer to *Storing broadcast frequencies* on page 84.

Storing broadcast frequencies

With a touch of any of the preset tuning keys ("1" to "6"), you can easily store up to six broadcast channels for later recall (also with the touch of a key).

- 1 **Select a frequency that you want to store in memory.**

Using the Digital Radio (DAB)

2 Display the preset channel list.

- ➔ For details, refer to *Using the touch panel keys* on page 84.

3 Keep touching a preset tuning key [1] to [6].

The selected radio station has been stored in memory.

The next time you touch the same preset tuning key "1" to "6", the service component is re-called from memory.

- ❑ Up to 18 stations, six for each of the three bands can be stored in memory. ■

Selecting a channel from the list

You can select a channel by searching channel list.

1 Touch on the "Digital Radio" screen.

The list screen appears.

2 Touch the category you want.

You can select a channel from the following categories.

- **Ensemble:**
You can select a Service Component from the relevant ensemble.
- **PTY:**
You can select a Service Component from PTY information.
❑ The PTY can be selected are [NEWS&INF], [Popular], [Classics] or [Others].
- **Service Component:**
You can select a Service Component from the list of all components.

3 Touch the item you want.



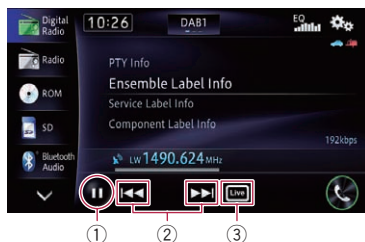
It changes to the selected channel.

- ❑ If you touch [Update], you can update the channel list.
- ❑ [ABC] may appear depending on the list. If you touch [ABC], you can search by alphabet. ■

Listening to a recent broadcast

You can listen to the service component that has been broadcasted (time shift function).

- Touch  on the "Digital Radio" screen. Switches to the time shift function mode.



① Playback and Pause

Touching  or  switches between play-back and pause.

② Fast reverse or forward

Touch  and you can perform fast reverse the play time for one minute.

Touch  and you can perform fast forward the play time for one minute.

③ Returns to live broadcast

- ❑ If you switch the band in the time shift function mode, the time shift function mode is cancelled and switches to the current live broadcast. ■

Using advanced functions

Switching to a channel with good receiving sensitivity automatically

If the tuner cannot get good reception, the unit will automatically search for another ensemble that supports the same service component. If no alternative service component can be found or reception remains poor, this function will automatically switch to an identical FM broadcast.

- ❑ After the channel is switched, if the originally channel regains good receiving sensitivity, the system switches back to the original channel automatically.

1 Touch on the "Digital Radio" screen.

The "Function" menu appears.

2 Touch [Service follow].

The "Service follow" screen appears.

3 Touch [On].

Automatic channel switching is enabled.

- ❑ If you touch [Off], setting for switching the channel automatically is disabled. 

Operating by hardware buttons

Pressing the TRK button

You can move the preset channels up or down.

Pressing and holding the TRK button

You can perform seek tuning. 

Playing audio CDs

You can play a normal music CD using the built-in drive of the navigation system. This section describes how.

Starting procedure

1 Display the AV operation screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Insert the disc you want to play into the disc-loading slot.

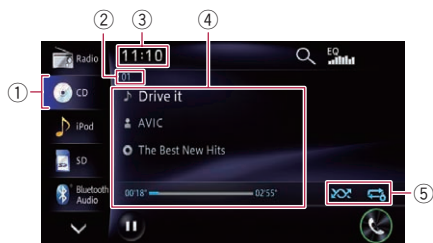
Playback starts from the first track of the CD.

- For details, refer to *Inserting and ejecting a disc* on page 17.
- ❑ If the disc is already set, touch [Disc] on the left edge of the screen.
- For details, refer to **Selecting a source** on page 76.

3 Use the touch panel keys on the screen to control the disc.

- For details, refer to *Using the touch panel keys* on page 87. ❑

Reading the screen



① Source icon

Shows which source has been selected.

② Track number indicator

Shows the number of the track currently playing.

③ Current time

④ Current track information

- : Track title

Shows the title of the track currently playing (when available).

- : **Artist name**

Shows the artist name of the track currently playing (when available).

- : **Album title**

Shows the title of the album of the current track (when available).

- **Play time**

Shows the elapsed playing time within the current track.

- ❑ "-----" is displayed if there is no corresponding information.

⑤ Playback condition indicator

Indicates the current playback condition.

Playing tracks in random order

Indicator	Meaning
	Does not play tracks in random order.
	Plays all tracks in the current disc in random order.

Setting a repeat play range

Indicator	Meaning
	Repeats the current disc.
	Repeats just the current track.

Using the touch panel keys



① Selects a track from the list

Touching the key displays a list which lets you see the track titles on a disc. You can play a track on the list by touching it.



❑ "-----" is displayed if there is no corresponding information.

② Recalls equaliser curves

➡ For details, refer to *Using the equaliser* on page 151.

③ Operates some functions by swipe action

➡ For details, refer to *Swipe action* on page 27.

④ Sets a repeat play range

The repeat play range can be changed by only touching a single key.

❑ If you perform track search or fast forward or reverse, track repeat playback is automatically cancelled.

➡ For details, refer to **Playback condition indicator** on page 87.

⑤ Displays the "Phone" screen

➡ For details, refer to *Displaying the phone menu* on page 67.

⑥ Plays tracks in random order

All tracks in the disc can be played at random by only touching a single key.

❑ If you turn the random play on when the repeat play range is set to , the repeat play range changes to  automatically.

➡ For details, refer to **Playback condition indicator** on page 87.

⑦ Playback and Pause

Touching  or  switches between playback and pause. 

Operating by hardware buttons

Pressing the TRK button

You can skip tracks forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. 

Playing music files on ROM

You can play a disc that contains compressed audio files using the built-in drive of the navigation system. This section describes these operations.

- ❑ In the following description, the MP3, WMA, AAC files are collectively referred to as "Compressed audio files".

Starting procedure

1 Display the AV operation screen.

- ➡ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Insert the disc you want to play into the disc-loading slot.

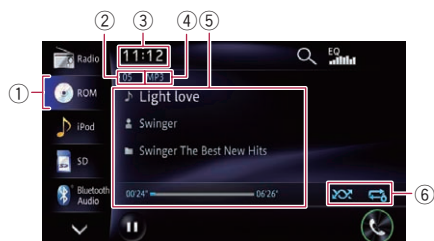
Playback starts from the first file of the ROM.

- ➡ For details, refer to *Inserting and ejecting a disc* on page 17.
- ❑ If the disc is already set, touch [Disc] on the left edge of the screen.
- ➡ For details, refer to *Selecting a source* on page 76.

3 Use the touch panel keys on the screen to control the disc.

- ➡ For details concerning operations, refer to *Using the touch panel keys* on page 90. 

Reading the screen



① Source icon

Shows which source has been selected.

② Track number indicator

Shows the number of the track currently playing.

③ Current time

④ File type indicator

Shows the type of audio files.

⑤ Current file information

-  **Track title**
Shows the title of the track currently playing (when available).
❑ If the title of a track is not available, the file name appears.
-  **Artist name**
Shows the artist name currently playing (when available).
-  **Folder name/Album title**
Shows the title of the album of the current file when MP3 or AAC data have information. Otherwise, shows the folder name currently paying.
- **Play time**
Shows the elapsed playing time within the current file.

- ❑ "-----" is displayed if there is no corresponding information.

⑥ Playback condition indicator

Indicates the current playback condition.

Playing files in random order

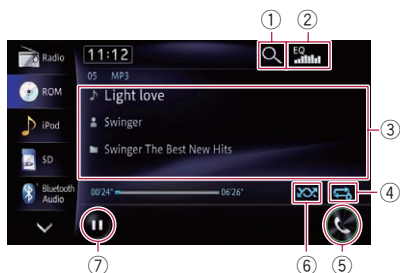
Indicator	Meaning
	Does not play files in random order.
	Plays all audio files in the current repeat play range in random order.

Setting a repeat play range

Indicator	Meaning
	Repeats all compressed audio files.
	Repeats just the current file.
	Repeats the current folder.



Using the touch panel keys

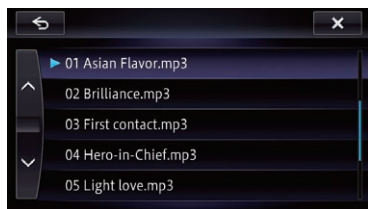


① Selects a file from the list

Touching the key displays a list which lets you see the track titles or folder names on a disc.

- ❑ If the title of a track is not available, the file name appears.

Touching a folder on the list shows its content. You can play a file on the list by touching it.



② Recalls equaliser curves

➔ For details, refer to *Using the equaliser* on page 151.

③ Operates some functions by swipe action

➔ For details, refer to *Swipe action* on page 27.

④ Sets a repeat play range

The repeat play range can be changed by only touching a single key.

- ❑ If you select another folder during repeat play, the repeat play range changes to .
- ❑ If you perform fast reverse or fast forward during , the repeat play range changes to .
- ❑ When  is selected, it is not possible to playback a subfolder of that folder.

➔ For details, refer to **Playback condition indicator** on page 89.

⑤ Displays the “Phone” screen

➔ For details, refer to *Displaying the phone menu* on page 67.

⑥ Plays files in random order

The files in the current repeat play range can be played at random by only touching a single key.

- ❑ If you turn the random play on when the repeat play range is set to , the repeat play range changes to  automatically.

➔ For details, refer to **Playback condition indicator** on page 89.

⑦ Playback and Pause

Touching  or  switches between playback and pause. .

Operating by hardware buttons

Pressing the TRK button

You can skip files forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. .

Playing a DVD-Video

You can play a DVD-Video using the built-in drive of the navigation system. This section describes operations for playing a DVD-Video.

Starting procedure

1 Display the AV operation screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Insert the disc you want to play into the disc-loading slot.

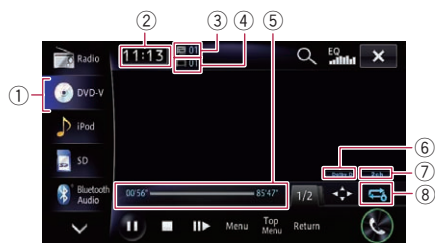
The source changes and then playback will start.

- For details, refer to *Inserting and ejecting a disc* on page 17.
- ❑ If the disc is already set, touch [Disc] on the left edge of the screen.
- For details, refer to **Selecting a source** on page 76.

3 Use the touch panel keys on the screen to control the disc.

- For details, refer to *Using the touch panel keys* on page 91.

Reading the screen



① Source icon

Shows which source has been selected.

② Current time

③ Title number indicator

Shows the title number currently playing.

④ Chapter number indicator

Shows the chapter number currently playing.

⑤ Play time indicator

Shows the elapsed playing time within the current title.

⑥ Digital sound format indicator

Shows which digital sound format (surround sound format) has been selected.

⑦ Audio channel indicator

Shows the current audio channel type, such as "Mch" (Multi-channel).

⑧ Repeat range indicator

Shows which repeat range has been selected.

Setting a repeat play range

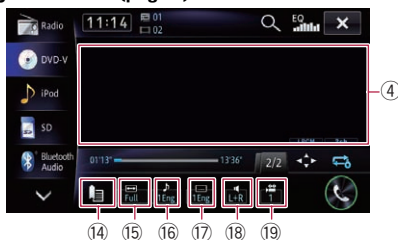
Indicator	Meaning
	Plays the whole of the current disc.
	Repeats just the current chapter.
	Repeats just the current title.

Using the touch panel keys

Playback screen (page 1)



Playback screen (page 2)



- ❑ With some discs, the icon may be displayed, meaning that the operation is invalid.

① **Searches for a desired scene and starts playback from a specified time**

➡ For details, refer to *Searching for a specific scene and starting playback from a specified time* on page 93.

② **Recalls equaliser curves**

➡ For details, refer to *Using the equaliser* on page 151.

③ **Hides the touch panel keys and information of the current video**

Touching  shows only the current video.

☐ If you want to display the touch panel keys and information of the current video again, touch anywhere on the LCD screen.

④ **Operates some functions by swipe action**

☐ When the video is displayed in full screen mode, the whole screen becomes a swipe response area.

➡ For details, refer to *Swipe action* on page 27.

⑤ **Sets a repeat play range**

The repeat play range can be changed by only touching a single key.

☐ If you perform chapter (title) search, fast forward, fast reverse or slow motion playback, the repeat play range changes to .

☐ This function is not available when disc playback has been stopped.

➡ For details, refer to **Repeat range indicator** on page 91.

⑥ **Displays the "Phone" screen**

➡ For details, refer to *Displaying the phone menu* on page 67.

⑦ **Displays the DVD menu keypad**

➡ For details, refer to *Using the DVD menu by touch panel keys* on page 94.

⑧ **Performs an operation (such as resuming) that is stored on the disc**

When using a DVD that has a point recorded that indicates where to return to, the DVD returns to the specified point and begins playback from there.

⑨ **Displays the DVD menu**

You can display the menu by touching [Menu] or [Top Menu] while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the

menu. For details, refer to the instructions provided with the disc.

⑩ **Frame-by-frame playback (or slow-motion playback)**

➡ For details, refer to *Frame-by-frame playback* on page 94.

➡ For details, refer to *Slow motion playback* on page 94.

⑪ **Stops playback**

⑫ **Playback and Pause**

Touching  or  switches between playback and pause.

⑬ **Switches to the next page of touch panel keys**

⑭ **Resumes playback (Bookmark)**

➡ For details, refer to *Resuming playback (Bookmark)* on page 93.

⑮ **Changing the wide screen mode**

➡ For details, refer to *Changing the wide screen mode* on page 94.

⑯ **Switches the audio language**

You can switch the audio language while the disc is playing when a disc has multilingual data (multi-audio).

☐ Each time you touch this key changes the audio language.

➡ For details, refer to *Setting the top-priority languages* on page 100.

⑰ **Switches the subtitle language**

You can switch the subtitle language while the disc is playing when a disc has multilingual data (multi-subtitle).

☐ Each time you touch this key changes the subtitle language.

➡ For details, refer to *Setting the top-priority languages* on page 100.

⑱ **Selects audio output**

When playing DVDs recorded with LPCM audio, you can switch the audio output. Touch  repeatedly until the desired audio output appears on the display.

Each touch of  changes the settings as follows:

- **L+R:** Left and right

- **L:** Left

- **R:** Right

- **Mix:** Mixing left and right

☐ This function is not available when disc playback has been stopped.

Playing a DVD-Video

- ❑ The appearance of this key changes according to the current setting.
- ① **Changes the viewing angle (Multi-angle)**
Each touch of  switches between viewing angles.
- ❑ During playback of a scene shot from multiple angles, the angle icon  is displayed. Turn the angle icon display on or off using the “DVD/DivX® Setup” menu.
- ❑ The appearance of this key changes according to the current setting.
- ➡ For details, refer to *Setting the angle icon display* on page 100.

Resuming playback (Bookmark)

The Bookmark function lets you resume playback from a selected scene the next time the disc is loaded.

● Touch on the “DVD-V” screen.

You can bookmark one point for each of up to five discs. If you try to memorise another point for the same disc, the older bookmark will be overwritten by the newer one.

- ❑ To clear the bookmark on a disc, touch and hold .

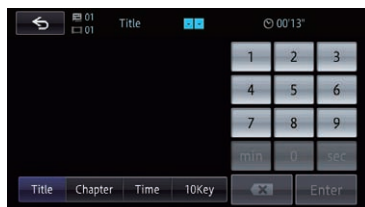
Searching for a specific scene and starting playback from a specified time

You can search for the scene you want by specifying a title or chapter, and the time.

- ❑ Chapter search and time search are not available when disc playback has been stopped.

1 Touch  and then touch [Title] (title), [Chapter] (chapter), [Time] (time).

2 Touch the keys to input the target number or time and then touch [Enter].



For titles, chapters

- To select 3, touch [3] and [Enter] in order.
- To select 10, touch [1] and [0] and [Enter] in order.

For time (time search)

- To select 5 minutes 3 seconds, touch [5], [min], [3], [sec] and [Enter] in order.
- To select 71 minutes 00 seconds, touch [7], [1], [min] and [Enter] in order.
- To select 100 minutes 05 seconds, touch [1], [0], [0], [5], [sec] and [Enter] in order.
- ❑ To cancel an input number, touch . To cancel the input numbers, touch and hold .

Direct number search

You can use this function when you need to enter a numerical command during DVD playback.

1 Touch .

2 Touch [10Key].

3 Touch [0] to [9] to input the desired number.

4 While the input number is displayed, touch [Enter].

Operating the DVD menu

You can operate the DVD menu by touching the menu item on the screen directly.

- ❑ This function can be used when the  key is displayed on the upper left corner of the LCD screen.

- ❑ This function may not work properly with some DVD disc content. In that case, use touch panel keys to operate the DVD menu.
- ❑ If you touch the screen while  is displayed, the touch panel keys will not be displayed.

1 Touch the screen to display the touch panel keys.

2 Touch [Top Menu] or [Menu] to display the touch panel keys to operate the DVD menu.

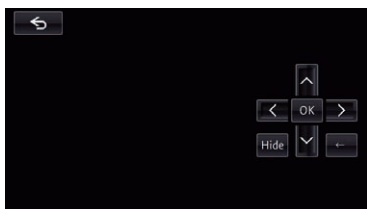
3 Touch the desired menu item.

- If you touch , the touch panel keys for selecting the menu item are displayed.

Using the DVD menu by touch panel keys

If items on the DVD menu appear, the touch panel keys may overlay them. If so, select an item using those touch panel keys.

1 Touch , ,  or  to select the desired menu item.



- ❑ If the touch panel keys for DVD menu selection disappear, touch anywhere on the screen, and then touch . The touch panel keys are displayed again.

2 Touch [OK].

Playback starts from the selected menu item. The way to display the menu differs depending on the disc.

- If you touch  or , the display position of touch panel keys is changed each time you touch it.
- If you touch [Hide], the touch panel keys disappear and the  icon is displayed. You can select a menu item by touching it.

Frame-by-frame playback

This lets you move ahead one frame at a time during pause.

● **Touch [II▶] during pause.**

Each time you touch [II▶], you move ahead one frame.

- ❑ To return to normal playback, touch [▶] or [II].
- ❑ With some discs, images may be unclear during frame-by-frame playback.

Slow motion playback

This lets you slow down playback speed.

1 Touch and hold [II▶] until ▶▶ is displayed during playback.

The icon ▶▶ is displayed, and forward slow motion playback begins.

- ❑ To return to normal playback, touch [▶] or [II].

2 Touch [II▶] to adjust playback speed during slow motion playback.

Each time you touch [II▶] it changes the speed in four steps in the following order:

1/16 → 1/8 → 1/4 → 1/2

- ❑ There is no sound during slow motion playback.
- ❑ With some discs, images may be unclear during slow motion playback.
- ❑ Reversed slow motion playback is not possible.

Changing the wide screen mode

You can set the screen size of video.

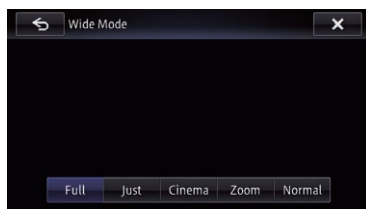
- ❑ The default setting is "Full".

1 Touch  on the "DVD-V" screen.

- ❑ The appearance of this key changes according to the current setting.

Playing a DVD-Video

2 Touch the desired mode.



- **Full**
A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.
 - **Just**
The picture is enlarged slightly at the centre and the amount of enlargement increases horizontally toward the ends of the picture, enabling you to enjoy a 4:3 picture without sensing any disparity, even on a wide screen.
 - **Cinema**
A picture is enlarged by the same proportion as "**Full**" or "**Zoom**" in the horizontal direction and by an intermediate proportion between "**Full**" and "**Zoom**" in the vertical direction; ideal for a cinema-sized (wide screen) picture where captions lie outside the frame.
 - **Zoom**
A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized (wide screen) picture.
 - **Normal**
A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as those of the normal picture.
- ☐ Images may be unclear when "**Cinema**" or "**Zoom**" is selected.
- ☐ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law. ☐

Operating by hardware buttons

Pressing the TRK button

You can skip chapters forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. ☐

You can play a DivX disc using the built-in drive of the navigation system. This section describes those operations.

Starting procedure

1 Display the AV operation screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Insert the disc you want to play into the disc-loading slot.

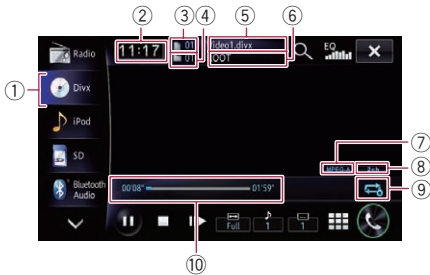
The source changes and then playback will start.

- ➔ For details, refer to *Inserting and ejecting a disc* on page 17.
- ❑ If the disc is already set, touch [Disc] on the left edge of the screen.
- ➔ For details, refer to *Selecting a source* on page 76.

3 Use the touch panel keys on the screen to control the disc.

- ➔ For details, refer to *Using the touch panel keys* on page 96. ■

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **Current time**
- ③ **File number indicator**
Shows the file number currently playing.
- ④ **Folder number indicator**
Shows the folder number currently playing.
- ⑤ **Current file name indicator**
Shows the file name currently playing.

- ⑥ **Current folder name indicator**
Shows the folder name currently playing.
- ⑦ **Digital sound format indicator**
Shows the digital sound format (surround sound format) currently selected.
- ⑧ **Audio channel indicator**
Shows the current audio channel type, such as "Mch" (Multi-channel).
- ⑨ **Repeat range indicator**
Shows which repeat range has been selected.

Setting a repeat play range

Indicator	Meaning
	Plays the whole of the current disc.
	Repeats just the current file.
	Repeats just the current folder.

- ⑩ **Play time indicator**
Shows the elapsed playing time within the current file. ■

Using the touch panel keys

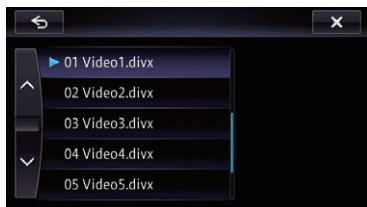
Playback screen



- ❑ With some discs, the icon ⏏ may be displayed, meaning that the operation is invalid.
- ① **Selects a file from the list**
Touching the key displays the list which lets you find file names or folder names on a disc.
 - ❑ A dash (–) is displayed if there is no corresponding information.

Playing a DivX video

Touching a folder on the list shows its content. You can play a file on the list by touching it.



The contents of the folder in which the currently playing file is located are displayed.

② Recalls equaliser curves

➔ For details, refer to *Using the equaliser* on page 151.

③ Hides the touch panel keys and information of the current video

Touching shows only the current video.

☐ If you want to display the touch panel keys and information of the current video again, touch anywhere on the LCD screen.

④ Operates some functions by swipe action

☐ When the video is displayed in full screen mode, the whole screen becomes a swipe response area.

➔ For details, refer to *Swipe action* on page 27.

⑤ Sets a repeat play range

The repeat play range can be changed by only touching a single key.

☐ If you select another folder during repeat play, the repeat play range changes to .

☐ If you perform fast reverse or fast forward during , the repeat play range changes to .

☐ When is selected, it is not possible to playback a subfolder of that folder.

➔ For details, refer to **Repeat range indicator** on page 96.

⑥ Displays the “Phone” screen

➔ For details, refer to *Displaying the phone menu* on page 67.

⑦ Searches for a desired scene and starts playback from a specified time

➔ For details, refer to *Starting playback from a specified time* on page 98.

⑧ Switches the subtitle language

You can switch the subtitle language while the disc is playing when a disc has multilingual data (multi-subtitle).

☐ Each time you touch this key changes the subtitle language.

➔ For details, refer to *Setting the top-priority languages* on page 100.

⑨ Switches the audio language

You can switch the audio language while the disc is playing when a disc has multilingual data (multi-audio).

☐ Each time you touch this key changes the audio language.

➔ For details, refer to *Setting the top-priority languages* on page 100.

⑩ Changing the wide screen mode

➔ For details, refer to *Changing the wide screen mode* on page 98.

⑪ Frame-by-frame playback (or slow-motion playback)

➔ For details, refer to *Frame-by-frame playback* on page 97.

➔ For details, refer to *Slow motion playback* on page 97.

⑫ Stops playback

⑬ Playback and Pause

Touching switches between playback and pause.

Frame-by-frame playback

This lets you move ahead one frame at a time during pause.

● Touch during pause.

Each time you touch , you move ahead one frame.

☐ To return to normal playback, touch or .

☐ With some discs, images may be unclear during frame-by-frame playback.

Slow motion playback

This lets you slow down playback speed.

Playing a DivX video

- **Touch and hold [⏮] until ⏮ is displayed during playback.**

The icon ⏮ is displayed, and forward slow motion playback begins.

- ❑ To return to normal playback, touch [▶].
- ❑ There is no sound during slow motion playback.
- ❑ With some discs, images may be unclear during slow motion playback.
- ❑ Reversed slow motion playback is not possible.

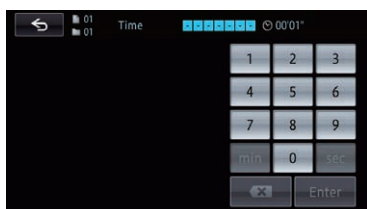
Starting playback from a specified time

You can search for a desired scene by specifying the time.

- ❑ Time search is impossible when disc playback has been stopped.

1 Touch [⏮].

2 Touch the keys to input the target number or time and then touch [Enter].



- To select 5 minutes 3 seconds, touch [5], [min], [3], [sec] and [Enter] in order.
- To select 71 minutes 00 seconds, touch [7], [1], [min] and [Enter] in order.
- To select 100 minutes 05 seconds, touch [1], [0], [0], [5], [sec] and [Enter] in order.
- ❑ To cancel an input number, touch [X].
To cancel the input numbers, touch and hold [X].

Changing the wide screen mode

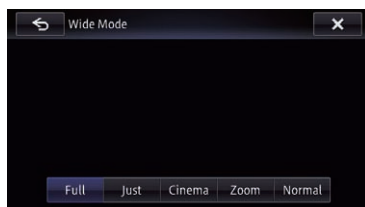
You can set the screen size of video.

- ❑ The default setting is "Full".

1 Touch [⏮] on the "DivX" screen.

- ❑ The appearance of this key changes according to the current setting.

2 Touch the desired mode.



- **Full**
A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.
- **Just**
The picture is enlarged slightly at the centre and the amount of enlargement increases horizontally toward the ends of the picture, enabling you to enjoy a 4:3 picture without sensing any disparity, even on a wide screen.
- **Cinema**
A picture is enlarged by the same proportion as "Full" or "Zoom" in the horizontal direction and by an intermediate proportion between "Full" and "Zoom" in the vertical direction; ideal for a cinema-sized (wide screen) picture where captions lie outside the frame.
- **Zoom**
A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized (wide screen) picture.
- **Normal**
A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as those of the normal picture.
- ❑ Images may be unclear when "Cinema" or "Zoom" is selected.

Playing a DivX video

- ❑ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law. ❑

Pressing and holding the TRK button

You can perform fast reverse or fast forward. ❑

Playing DivX® VOD content

Some DivX VOD (video on demand) content may only be playable a fixed number of times. When you load a disc containing this type of DivX VOD content, the remaining number of plays is shown on-screen and you then have the option of playing the disc (thereby using up one of the remaining plays), or stopping. If you load a disc that contains expired DivX VOD content (for example, content that has zero remaining plays), **"This DivX rental has expired."** is displayed.

- ❑ If your DivX VOD content allows an unlimited number of plays, then you may load the disc into your player and play the content as often as you like, and no message will be displayed.
- ❑ In order to play DivX VOD content on this unit, you first need to register the unit with your DivX VOD content provider. For information about your registration code, refer to *Displaying your DivX VOD registration code* on page 149.
- ❑ DivX VOD content is protected by a DRM (Digital Rights Management) system. This restricts playback of content to specific, registered devices.

● If the message is displayed after loading a disc containing DivX VOD content, touch [▶].

Playback of the DivX VOD content will start.

- ❑ Touch [◀◀] or [▶▶] to switch between files.
- ❑ If you do not want to play the DivX VOD content, touch [■]. ❑

Operating by hardware buttons

Pressing the TRK button

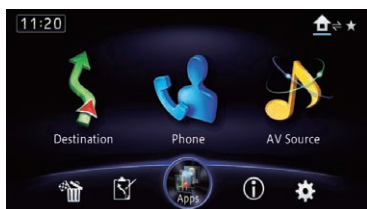
You can skip files forward or backward.

This chapter describes how to configure the DVD-Video/DivX playback.

Displaying DVD/DivX® Setup menu

1 Press the HOME button to display the “Top Menu” screen.

2 Touch .



The “Edit/Settings” screen appears.

3 Touch [Source Settings].

The “Setting according to source” screen appears.

4 Touch [DVD/DivX® Setup].

The “DVD/DivX® Setup” screen appears.

5 Touch the item you want to configure.



Setting the top-priority languages

You can assign the top-priority language to the top-priority subtitle, audio and menu in initial playback. If the selected language is recorded on the disc, subtitles, audio and menu are displayed or output in that language.

1 Display the “DVD/DivX® Setup” screen.

➤ For details, refer to *Displaying DVD/DivX® Setup menu* on page 100.

2 Touch [Subtitle Language], [Audio Language] or [Menu Language].

Each language menu is displayed and the currently set language is selected.

3 Touch the desired language.

When you select “Others”, a language code input display is shown. Input the four-digit code of the desired language then touch [OK].

➤ For details, refer to *Language code chart for DVDs* on page 103.

❑ If the selected language is not recorded on the disc, the default language specified on the disc is output and displayed.

❑ You can also switch the subtitle and audio language by touching  or  during playback.

Even if you touch  or  to switch the subtitle or audio language, this setting will not change. .

Setting the angle icon display

You can set the angle icon  to display in scenes where the angle can be switched.

1 Display the “DVD/DivX® Setup” screen.

➤ For details, refer to *Displaying DVD/DivX® Setup menu* on page 100.

2 Touch [Multi Angle].

3 Touch [On] or [Off].

• **On** (default):

Displays the angle icon in scenes where the angle can be switched.

• **Off:**

Hides the angle icon. .

DVD-Video or DivX setup

Setting the aspect ratio

There are two kinds of displays. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use a regular rear display with a TV aspect of 4:3, you can set the aspect ratio suitable for your rear display. (We recommend use of this function only when you want to fit it to the rear display.)

- ☐ When using a regular display, select either “**Letter Box**” or “**Panscan**”. Selecting “**16:9**” may result in an unnatural image.

1 Display the “DVD/DivX® Setup” screen.

- ➔ For details, refer to *Displaying DVD/DivX® Setup menu* on page 100.

2 Touch [TV Aspect].

3 Touch [16:9], [Letter Box] or [Panscan].

- **16:9**: Wide screen image (16:9) is displayed as it is (initial setting).
- **Letter Box**: The image is in the shape of a letter box with black bands at the top and bottom of the screen.
- **Panscan**: The image is cut short at the right and left of the screen.

- ☐ When playing discs that do not have a panscan system, the disc is played back with “**Letter Box**” even if you select “**Panscan**” setting. Confirm whether the disc package bears the  mark.
- ☐ Some discs do not enable changing of the TV aspect. For details, refer to the disc's instructions. 

Setting the parental lock

Some DVD-Video discs let you use parental lock to set restrictions so that children cannot watch violent or adult-oriented scenes. You can set the parental lock level in steps as desired.

- ☐ When you set a parental lock level and then play a disc featuring a parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, the parental lock will not operate.

1 Display the “DVD/DivX® Setup” screen.

- ➔ For details, refer to *Displaying DVD/DivX® Setup menu* on page 100.

2 Touch [Parental Level].

3 Touch [0] to [9] to input a four-digit code number.

4 While the input number is displayed, touch [OK].

The code number is registered, and you can now set the level.

5 Touch any of [1] to [8] to select the desired level.

The parental lock level is set.

- **Parental Level 8**: Playback of the entire disc is possible (initial setting).
- **Parental Level 7 to Parental Level 2**: Playback of discs for children and non-adult oriented discs is possible.
- **Parental Level 1**: Only playback of discs for children is possible.

- ☐ If you want to change the parental level already set, enter the registered code number and then select the parental level.
- ☐ We recommend that you keep a record of your code number in case you forget it.
- ☐ The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. You cannot use the parental lock with discs that do not feature a recorded parental lock level.
- ☐ With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.
- ☐ If you forget the registered code number, touch  10 times on the number input screen. The registered code number is cancelled, letting you register a new one. 

Setting the auto play

When a DVD disc with a DVD menu is inserted, this unit will cancel the DVD menu automatically and start playback from the first chapter of the first title.

- ☐ This function is available on DVD-Video.
- ☐ Some DVDs may not operate properly. If this function is not fully operable, turn this function off and start playback.

1 Display the "DVD/DivX® Setup" screen.

- ➔ For details, refer to *Displaying DVD/DivX® Setup menu* on page 100.

2 Touch [Auto Play].

3 Touch [On] or [Off].

- **Off** (default):
Deactivates the auto play function.
- **On**:
Activates the auto play function.
- ☐ When "**Auto Play**" is set to "**On**", the repeat range is automatically set to  .

- ☐ The DivX subtitles will be displayed even when the subtitle file setting is on if no corresponding subtitle files exist.
- ☐ Up to three subtitle lines can be displayed collectively. .

Setting the subtitle file for DivX

You can select whether to display DivX external subtitles or not.

- ☐ If no DivX external subtitle files exist, the original DivX subtitles are displayed even when "**Custom**" is selected.

1 Display the "DVD/DivX® Setup" screen.

- ➔ For details, refer to *Displaying DVD/DivX® Setup menu* on page 100.

2 Touch [Subtitle File].

3 Touch [Original] or [Custom].

- ☐ Up to 42 characters can be displayed on one line. If more than 42 characters are set, the line breaks and the excess characters are displayed on the next line.
- ☐ Up to 126 characters can be displayed on one screen. If more than 126 characters are set, the excess characters will not be displayed.

DVD-Video or DivX setup

Language code chart for DVDs

Two-letter code, input code	Language	Two-letter code, input code	Language	Two-letter code, input code	Language
aa, 0101	Afar	ie, 0905	Interlingue	rn, 1814	Rundi
ab, 0102	Abkhazian	ik, 0911	Inupiaq	ro, 1815	Romanian
af, 0106	Afrikaans	in, 0914	Indonesian	ru, 1821	Russian
am, 0113	Amharic	is, 0919	Icelandic	rw, 1823	Kinyarwanda
ar, 0118	Arabic	it, 0920	Italian	sa, 1901	Sanskrit
as, 0119	Assamese	iw, 0923	Hebrew	sd, 1904	Sindhi
ay, 0125	Aymara	ja, 1001	Japanese	sg, 1907	Sango
az, 0126	Azerbaijani	ji, 1009	Yiddish	sh, 1908	Serbo-Croat
ba, 0201	Bashkir	jw, 1023	Javanese	si, 1909	Sinhala
be, 0205	Belarusian	ka, 1101	Georgian	sk, 1911	Slovak
bg, 0207	Bulgarian	kk, 1111	Kazakh	sl, 1912	Slovenian
bh, 0208	Bihari	kl, 1112	Greenlandic	sm, 1913	Samoa
bi, 0209	Bislama	km, 1113	Central Khmer	sn, 1914	Shona
bn, 0214	Bengali	kn, 1114	Kannada	so, 1915	Somali
bo, 0215	Tibetan	ko, 1115	Korean	sq, 1917	Albanian
br, 0218	Breton	ks, 1119	Kashmiri	sr, 1918	Serbian
ca, 0301	Catalan	ku, 1121	Kurdish	ss, 1919	Swati
co, 0315	Corsican	ky, 1125	Kirghiz	st, 1920	Sotho
cs, 0319	Czech	la, 1201	Latin	su, 1921	Sundanese
cy, 0325	Welsh	ln, 1214	Lingala	sv, 1922	Swedish
da, 0401	Danish	lo, 1215	Lao	sw, 1923	Swahili
de, 0405	German	lt, 1220	Lithuanian	ta, 2001	Tamil
dz, 0426	Dzongkha	lv, 1222	Latvian	te, 2005	Telugu
el, 0512	Greek	mg, 1307	Malagasy	tg, 2007	Tajik
en, 0514	English	mi, 1309	Maori	th, 2008	Thai
eo, 0515	Esperanto	mk, 1311	Macedonian	ti, 2009	Tigrinya
es, 0519	Spanish	ml, 1312	Malayalam	tk, 2011	Turkmen
et, 0520	Estonian	mn, 1314	Mongolian	tl, 2012	Tagalog
eu, 0521	Basque	mo, 1315	Moldavian	tn, 2014	Tswana
fa, 0601	Persian	mr, 1318	Marathi	to, 2015	Tonga
fi, 0609	Finnish	ms, 1319	Malay	tr, 2018	Turkish
fj, 0610	Fijian	mt, 1320	Maltese	ts, 2019	Tsonga
fo, 0615	Faroese	my, 1325	Burmese	tt, 2020	Tatar
fr, 0618	French	na, 1401	Nauru	tw, 2023	Twi
fy, 0625	Western Frisian	ne, 1405	Nepali	uk, 2111	Ukrainian
ga, 0701	Irish	nl, 1412	Dutch	ur, 2118	Urdu
gd, 0704	Scot.Gaelic	no, 1415	Norwegian	uz, 2126	Uzbek
gl, 0712	Galician	oc, 1503	Occitan	vi, 2209	Vietnamese
gn, 0714	Guarani	om, 1513	Oromo	vo, 2215	Volapük
gu, 0721	Gujarati	or, 1518	Oriya	wo, 2315	Wolof
ha, 0801	Hausa	pa, 1601	Panjabi	xh, 2408	Xhosa
hi, 0809	Hindi	pl, 1612	Polish	yo, 2515	Yoruba
hr, 0818	Croatian	ps, 1619	Pashto	zh, 2608	Chinese
hu, 0821	Hungarian	pt, 1620	Portuguese	zu, 2621	Zulu
hy, 0825	Armenian	qu, 1721	Quechua		
ia, 0901	Interlingua	rm, 1813	Romansh		



You can play compressed audio files stored in the external storage device (USB, SD).

- ❑ When you play audio files stored on a USB storage device, a USB interface cable for iPod / iPhone (sold separately) is required for connection.
- ❑ In the following description, the SD memory card and USB memory device are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device only, it is referred to as the “USB storage device”.

Starting procedure

1 Display the AV operation screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.

- ➔ For details, refer to *Plugging in a USB storage device* on page 21.
- ➔ For details, refer to *Inserting and ejecting an SD memory card* on page 18.
- ❑ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02.

3 Touch [USB] or [SD] on the left edge of the screen to display the “USB” or “SD” screen.

4 Use the touch panel keys on the screen to control the external storage device (USB, SD).

- ➔ For details, refer to *Using the touch panel keys (Music)* on page 105. ■

Reading the screen



- ❑ This unit may not achieve optimum performance with some external storage devices.
- ❑ You can play back the files on a USB storage device compliant with the Mass Storage Class. For details about the USB Class, refer to the manual supplied with the USB storage device.

① Source icon

Shows which source has been selected.

② File number indicator

Shows the number of the file currently playing.

③ Current time

④ File type indicator

Shows the type of audio files.

⑤ Playback mode

⑥ Current file information

- **Track title**
Shows the title of the track currently playing (when available).
❑ If the title of a track is not available, the file name appears.
- **Artist name**
Shows the artist name currently playing (when available).
- **Folder name/Album title**
Shows the title of the album of the current file (when available).
❑ If the title of an album is not available, the folder name appears.
- **Play time**
Shows the elapsed playing time within the current file.
❑ “-----” is displayed if there is no corresponding information.

Playing music files (from USB or SD)

⑦ Playback condition indicator

Indicates the current playback condition.

Playing files in random order

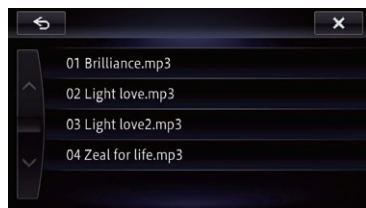
Indicator	Meaning
	Does not play files in random order.
	Plays all audio files in the current repeat play range in random order.

Setting a repeat play range

Indicator	Meaning
	Repeats all compressed audio files in the selected external storage device (USB, SD).
	Repeats just the current file.
	Repeats the current folder.



Touching the key displays the list which lets you find track titles or folder names on an external storage device (USB, SD). Touching a folder on the list shows its content. You can play a file on the list by touching it.



③ Recalls equaliser curves

➔ For details, refer to *Using the equaliser* on page 151.

④ Operates some functions by swipe action

➔ For details, refer to *Swipe action* on page 27.

⑤ Sets a repeat play range

The repeat play range can be changed by only touching a single key.

❑ If you skip the file forward or backward when the repeat play range in  the repeat play range changes to .

➔ For details, refer to **Playback condition indicator** on page 105.

⑥ Displays the “Phone” screen

➔ For details, refer to *Displaying the phone menu* on page 67.

⑦ Plays files in random order

The files in the current repeat play range can be played at random by only touching a single key.

❑ If you turn the random play on when the repeat play range is set to , the repeat play range changes to  automatically.

➔ For details, refer to **Playback condition indicator** on page 105.

⑧ Playback and Pause

Touching  or  switches between playback and pause. 

Using the touch panel keys (Music)



① Switches the operation screen

Touching this key switches between the screen to operate music files and that to operate video files. This touch panel key is only available when there are both audio and video files on the external storage device (USB, SD).

② Selects a file from the list

Operating by hardware buttons

Pressing the TRK button

You can skip files forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. 

Playing video files (from USB or SD)

You can play video files stored in the external storage device (USB, SD).

- ❑ When you play video files stored on a USB storage device, a USB interface cable for iPod / iPhone (sold separately) is required for connection.
- ❑ In the following description, the SD memory card and USB memory device are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device only, it is referred to as the “USB storage device”.

Starting procedure

1 Display the AV operation screen.

- ➡ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.

- ➡ For details, refer to *Plugging in a USB storage device* on page 21.
- ➡ For details, refer to *Inserting and ejecting an SD memory card* on page 18.
- ❑ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02.

3 Touch [USB] or [SD] on the left edge of the screen to display the “USB” or “SD” screen.

4 Touch the screen to display the touch panel keys.

5 Use the touch panel keys on the screen to control the external storage device (USB, SD).

- ➡ For details, refer to *Using the touch panel keys (Video)* on page 108. ■

Reading the screen



- ❑ This unit may not achieve optimum performance with some external storage devices.
- ❑ You can play back the files on a USB storage device compliant with the Mass Storage Class. For details about the USB Class, refer to the manual supplied with the USB storage device.

① Source icon

Shows which source has been selected.

② File number indicator

Shows the number of the file currently playing.

③ Current time

④ Playback mode

⑤ Current video information

• File name indicator

Shows the file name currently playing.

• Folder name indicator

Shows the folder name currently playing.

⑥ Playback condition indicator

Indicates the current playback condition.

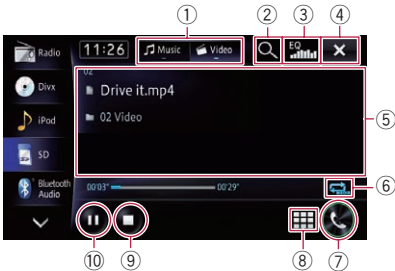
Setting a repeat play range

Indicator	Meaning
	Repeats all video files in the selected external storage device (USB, SD).
	Repeats just the current file.
	Repeats the current folder.

7 Play time indicator

Shows the elapsed playing time within the current file. 

Using the touch panel keys (Video)

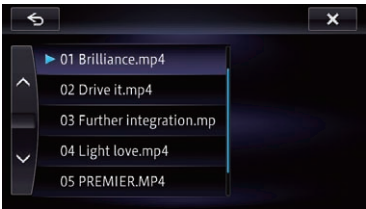


1 Switches the operation screen

Touching this key switches between the screen to operate music files and that to operate video files. This touch panel key is only available when there are both audio and video files on the external storage device (USB, SD).

2 Selects a file from the list

You can select and play your choice of titles from the list.



The contents of the folder in which the currently playing file is located are displayed.

3 Recalls equaliser curves

➔ For details, refer to *Using the equaliser* on page 151.

4 Hides the touch panel keys and information of the current video

Touching  shows only the current video.

☐ If you want to display the touch panel keys and information of the current video again, touch anywhere on the LCD screen.

5 Operates some functions by swipe action

☐ When the video is displayed in full screen mode, the whole screen becomes a swipe response area.

➔ For details, refer to *Swipe action* on page 27.

6 Sets a repeat play range

The repeat play range can be changed by only touching a single key.

➔ For details, refer to *Playback condition indicator* on page 107.

7 Displays the “Phone” screen

➔ For details, refer to *Displaying the phone menu* on page 67.

8 Searches for a desired scene and starts playback from a specified time

➔ For details, refer to *Searching for a specific scene and starting playback from a specified time* on page 108.

9 Stops playback

10 Playback and Pause

Touching  or  switches between playback and pause.

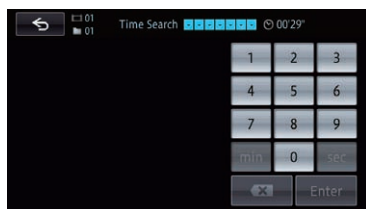
Searching for a specific scene and starting playback from a specified time

You can search for a desired scene by specifying the time.

1 Touch .

Playing video files (from USB or SD)

2 Touch the keys to input the target number or time and then touch [Enter].



- To select 5 minutes 3 seconds, touch **[5]**, **[min]**, **[3]**, **[sec]** and **[Enter]** in order.
- To select 71 minutes 00 seconds, touch **[7]**, **[1]**, **[min]** and **[Enter]** in order.
- To select 100 minutes 05 seconds, touch **[1]**, **[0]**, **[0]**, **[5]**, **[sec]** and **[Enter]** in order.
- ❑ To cancel an input number, touch **[X]**.
To cancel the input numbers, touch and hold **[X]**. ❑

Operating by hardware buttons

Pressing the TRK button

You can skip files forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. ❑

⚠ CAUTION

For iPod with Lightning connector users

iPod source is not available when an iPod with Lightning connector is connected with an HDMI/USB interface cable for iPod / iPhone (CD-IH202) (sold separately) to this navigation system.

When you want to play music and/or video files on your iPod with a Lightning connector, first install **CarMediaPlayer** on your iPod with a Lightning connector and then launch

CarMediaPlayer while in **AppRadio Mode**.

- ➡ For details of **AppRadio Mode**, refer to Chapter 25.
- ➡ Refer to the **CarMediaPlayer** manual for more information.
- ❑ To use iPod source, you must connect your iPod to the navigation system using a USB interface cable for iPod / iPhone (CD-IU201N) (sold separately) and a Lightning to 30-pin Adapter (Apple Inc. products) (sold separately).
However, functions related to iPod video files and **AppRadio Mode** are not available.
- ➡ For details, refer to *Connecting your iPod* on page 20.

For iPod with 30-pin connector users

- Depending on your iPod, there may not be any output unless you use a USB interface cable for iPod / iPhone (CD-IU201N) (sold separately). Be sure to use a USB interface cable for iPod / iPhone (CD-IU201N) (sold separately) to connect your iPod.
- ➡ For details, refer to *Connecting your iPod* on page 20.

Starting procedure

1 Set "iPod Connection Settings" to "30-pin Connector".

- ➡ For details, refer to *Selecting the device connection method* on page 157.
- ➡ For details, refer to *Setting the iPod connection* on page 149.

2 Display the AV operation screen.

- ➡ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

3 Connect your iPod.

The source changes and then playback will start.

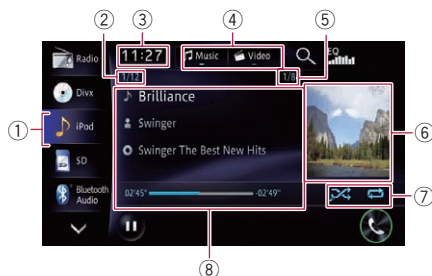
- ➡ For details, refer to *Connecting your iPod* on page 20.
- ❑ If the iPod is already connected, touch **[iPod]** on the left edge of the screen.
 - ➡ For details, refer to **Selecting a source** on page 76.
- ❑ If you connect the iPhone or iPod touch, quit applications before connecting.

4 Use the touch panel keys on the screen to control your iPod.

- ➡ For details of the operation, refer to *Using the touch panel keys* on page 112.
- ❑ The video image of iPod may have noise if the rear display outputs the video image. When noise is produced in the video image of iPod, turn off output setting of the rear display.
- ➡ For details of the operations, refer to *Selecting the video for rear display* on page 160. ■

Reading the screen

Music



Using an iPod (iPod)

Video



- ① **Source icon**
Shows which source has been selected.
- ② **Song number indicator**
Shows the number of the song and the total number of songs in the selected list.
- ③ **Current time**
- ④ **Playback mode**
- ⑤ **Chapter number indicator**
Shows the current chapter number when a file with chapters is played (when available).
- ⑥ **Album artwork**
Album art of the current song is displayed if it is available.
- ⑦ **Playback condition indicator**
Indicates the current playback condition.

Setting the shuffle play

Indicator	Meaning
	Cancels the shuffle play.
	Plays back songs or videos in random order within the selected list.
	Selects an album randomly, and then plays back all the songs in that album in order. The actions while this indicator is displayed on the video operation screen vary depending on the connected iPod.

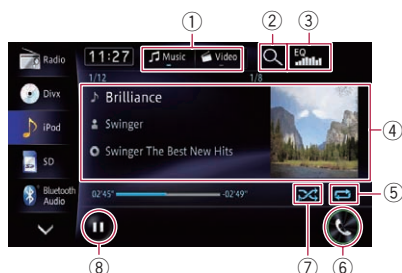
Setting a repeat play range

Indicator	Meaning
	Repeats all songs or videos in the selected list.
	Repeats just the current song or video.

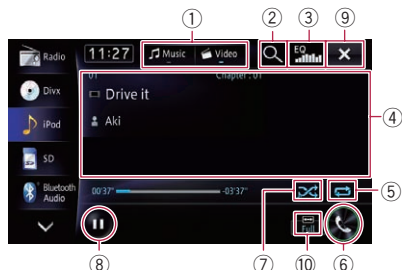
- ⑧ **Current song (episode) information**
 - **Song title (episode)**
Shows the title of the current song. When a podcast is played, the episode is displayed (when available).
 - **Artist name (podcast title)**
Shows the artist name currently playing. When a podcast is played, the podcast title is displayed (when available).
 - **Album title (podcast producer)**
Shows the title of the album for the song. When a podcast is played, the podcast producer is displayed (when available).
 - **Play time**
Shows the elapsed playing time within the current song (episode).
 - ❑ "-----" is displayed if there is no corresponding information.
 - ⑨ **File number indicator**
Shows the number of the file currently playing (when available).
 - ⑩ **Current video information**
 - **File name indicator**
Shows the file name currently playing (when available).
 - **Artist name (podcast title)**
Shows the artist name currently playing. When a podcast is played, the podcast title is displayed (when available).
 - **Play time indicator**
Shows the elapsed playing time within the current file.
 - ❑ "-----" is displayed if there is no corresponding information.
- ❑ If characters recorded on the iPod are not compatible with this navigation system, they may become garbled.

Using the touch panel keys

Music



Video



① Switches the operation screen

Touching this key displays the touch panel key ([Video] or [Music]) to switch between the screen to operate video files and that to operate music files.

❑ This touch panel key is only available when there are both audio and video file in your iPod.

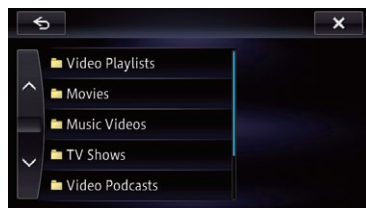
② Selects a file from the list

Touching a folder on the list shows its content. You can play a file on the list by touching it.

Music



Video



❑ If you touch **ABC**, alphabet characters are displayed. Touch the first letter of the title of the video/song you are looking for.

③ Recalls equaliser curves

➔ For details, refer to *Using the equaliser* on page 151.

④ Operates some functions by swipe action

❑ When the video is displayed in full screen mode, the whole screen becomes a swipe response area.

➔ For details, refer to *Swipe action* on page 27.

⑤ Sets a repeat play range

The repeat play range can be changed by only touching a single key.

➔ For details, refer to **Playback condition indicator** on page 111.

⑥ Displays the "Phone" screen

➔ For details, refer to *Displaying the phone menu* on page 67.

⑦ Sets the shuffle play

The shuffle play setting can be changed by only touching a single key.

➔ For details, refer to **Playback condition indicator** on page 111.

⑧ Playback and Pause

Touching **[▶]** or **[⏸]** switches between playback and pause.

⑨ Hides the touch panel keys and information of the current video

Touching **[X]** shows only the current video.

❑ If you want to display the touch panel keys and information of the current video again, touch anywhere on the LCD screen.

⑩ Changing the wide screen mode

➔ For details, refer to *Changing the wide screen mode* on page 113. ■

Using an iPod (iPod)

Changing the wide screen mode

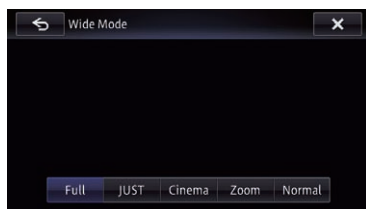
You can set the screen size of video.

- ☐ The default setting is "**Full**".

1 Touch on the "iPod" screen.

- ☐ The appearance of this key changes according to the current setting.

2 Touch the desired mode.



- **Full**
A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.
- **Just**
The picture is enlarged slightly at the centre and the amount of enlargement increases horizontally toward the ends of the picture, enabling you to enjoy a 4:3 picture without sensing any disparity, even on a wide screen.
- **Cinema**
A picture is enlarged by the same proportion as "**Full**" or "**Zoom**" in the horizontal direction and by an intermediate proportion between "**Full**" and "**Zoom**" in the vertical direction; ideal for a cinema-sized (wide screen) picture where captions lie outside the frame.
- **Zoom**
A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized (wide screen) picture.
- **Normal**
A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as those of the normal picture.

- ☐ Images may be unclear when "**Cinema**" or "**Zoom**" is selected.
- ☐ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law. 

Operating by hardware buttons

Pressing the TRK button

You can skip songs, videos or podcasts forward or backward.

When a song, video or podcast with chapter is played, you can skip chapter forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. 

**WARNING**

Certain uses of a smartphone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions.

If in doubt as to a particular function, only perform it while the car is parked.

No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

When connecting an iPhone or smartphone with the Aha Radio installed, you can control, view, and/or hear Aha Radio content from this navigation system. You can also display POI information from the Aha Radio application on the map screen and route to these POIs.

- ☐ In this chapter, the iPhone and iPod touch will be referred to as iPhone.
- ☐ For details concerning operations, refer to the Help and Tips section within the Aha Radio application.
- ☐ Aha Radio stations may require initial setup or sign in before the station can be accessed.
- ☐ Be sure to read *Using app-based connected content* before you perform this operation.
 - ➔ For details, refer to *Using app-based connected content* on page 194.

Note:

- Certain functionality of the Aha Radio service may not be available when accessing the service through the Pioneer navigation system, including, but not limited to, creating new Aha stations, deleting Aha stations, recording 'shouts' by voice, adjusting Aha Radio App settings, logging into Facebook, creating a Facebook account, logging into Twitter, or creating a Twitter account.
- Aha Radio is a service not affiliated with Pioneer. More information is available at <http://www.ahamobile.com>.
- A specific version of the Aha Radio application must be installed on your iPhone or smartphone to enjoy Aha Radio content on this navigation system.
Because the application for the iPhone or smartphone is not provided by Pioneer, the re-

quired version of the application may not yet be available at the time of purchase of the navigation system.

Availability, version and update information can be found at
<http://www.pioneer.eu/aharadio>

Information for compatibility of connected devices

The following is detailed information regarding the terminals required to use the Aha Radio application on this navigation system.

For iPhone with 30-pin connector users

- The device has iOS 3.0 or higher.
- A USB interface cable for iPod / iPhone (sold separately) must be used to connect your iPhone to this navigation system.

For iPhone with Lightning connector users

- The following cables are required for connection to this navigation system.
 - HDMI/USB interface cable for iPod / iPhone (CD-IH202) (sold separately)
 - Lightning Digital AV Adapter (Apple Inc. products) (sold separately)
 - Lightning to USB cable (supplied with iPhone with Lightning connector)
- The device is connected to this navigation system via Bluetooth.

For smartphone users

- The following conditions apply to the use of this function.
 - The device has Android OS 2.2 or higher.
 - The device supports Bluetooth SPP (Serial Port Profile).
- ☐ Compatibility with all Android devices is not guaranteed.
For details about Android device compatibility with this navigation system, refer to the information on our website.
- An App Connectivity Kit (CD-AH200) (sold separately) is required for connection to this navigation system.

Using Aha Radio

- The device is connected to this navigation system via Bluetooth. 

Starting procedure

The procedure varies depending on your type of device.

For iPhone with 30-pin connector users

1 Set "App connection settings" to "iPhone", and "iPod Connection Settings" to "30-pin Connector".

- For details, refer to *Selecting the device connection method* on page 157.
- For details, refer to *Setting the iPod connection* on page 149.

2 Start up the Aha Radio application installed on the iPhone.

- ☐ Before starting up, sign-in to Aha Radio from your iPhone.

3 Connect your iPhone.

- ☐ If the iPhone is already connected, touch [aha] on the left edge of the screen.
- For details, refer to *Connecting your iPod* on page 20.

4 Display the AV operation screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 76.

5 Touch [aha] on the left side of the screen to display the "aha" screen.

6 Use the touch panel keys on the screen to control the Aha Radio.

For iPhone with Lightning connector users

1 Set "App connection settings" to "iPhone", and "iPod Connection Settings" to "Digital AV Connector".

- For details, refer to *Selecting the device connection method* on page 157.
- For details, refer to *Setting the iPod connection* on page 149.

2 Register your iPhone and connect it to this product via the Bluetooth wireless technology.

- ☐ The registered device must be selected as the priority device.
- For details, refer to *Registering your Bluetooth devices* on page 58.

3 Unlock your iPhone.

4 Connect your iPhone.

- For details, refer to *Connecting your iPod* on page 20.

5 Display the AV operation screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 76.

6 Touch [aha] on the left side of the screen to display the "aha" screen.

When you touch [aha], the navigation system attempts to establish a Bluetooth connection. After the connection is successfully established, the touch panel keys on the "aha" screen are activated.

7 Use the touch panel keys on the screen to control the Aha Radio.

For smartphone users

1 Set "App connection settings" to "Android".

- For details, refer to *Selecting the device connection method* on page 157.

2 Register your smartphone and connect it to this product via the Bluetooth wireless technology.

- ☐ The registered device must be selected as the priority device.
- For details, refer to *Registering your Bluetooth devices* on page 58.

3 Unlock your smartphone.

4 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ☐ The cable connection method varies depending on your device.

➔ For details of the operations, refer to the Installation Manual.

5 Display the AV operation screen.

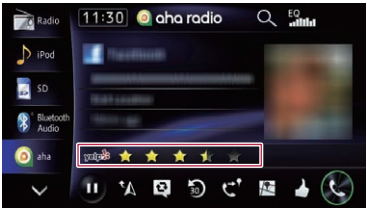
➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

6 Touch [aha] on the left side of the screen to display the “aha” screen.

When you touch [aha], the navigation system attempts to establish a Bluetooth connection. After the connection is successfully established, the touch panel keys on the “aha” screen are activated.

7 Use the touch panel keys on the screen to control the Aha Radio. ■

Shows the rated value of the current content displayed (only when and where applicable).



④ Content image

Displays an image of the current content if one is available. ■

Reading the screen



① Source icon

Shows which source has been selected.

② Current time

③ Current station information

Shows which source has been selected.

• Station name

Shows the name of the Aha Radio station to which navigation system is currently tuned.

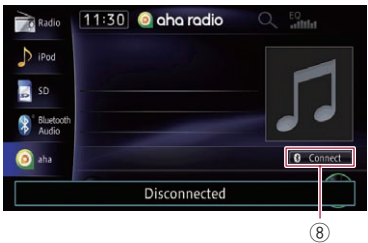
• Detailed information

Shows the information on the content currently being played.

□ “-----” is displayed if there is no corresponding information.

• Rating information

Using the touch panel keys

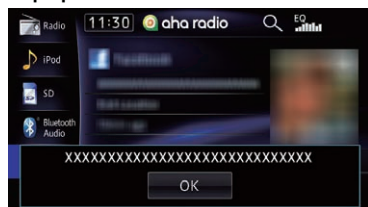


① Pauses the content currently playing and shows a text pop-up screen

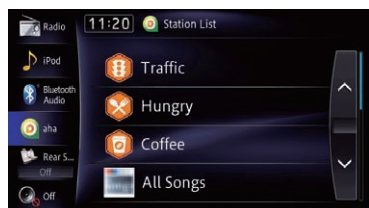
□ “-----” is displayed if there is no corresponding information.

Using Aha Radio

Pop-up screen



- Touching [OK] closes the pop-up screen and plays the content.
- ② **Selects an Aha Radio station from the list**
Touching this key displays the list of your available Aha Radio stations. Touch the desired Aha Radio station to change Aha Radio sources.



- ③ **Recalls equaliser curves**
➔ For details, refer to *Using the equaliser* on page 151.
- ④ **Operates some functions by swipe action**
➔ For details, refer to *Swipe action* on page 27.
- ⑤ **Displays the “Phone” screen**
➔ For details, refer to *Displaying the phone menu* on page 67.
- ⑥ **Performs additional functions of each station or content currently playing**
□ The icons displayed vary depending on each station or content.

Indicator Meaning



Touching the key discloses the current car location through Aha Radio.



Touching the key retweets the selected tweets with your Twitter account.

Indicator Meaning



Touching the key performs fast reverse of the current content for 30 seconds.



Touching the key sends you to the Location confirmation screen of the selected POI to search for the desired route.

➔ For subsequent operations, refer to *Setting a route to your destination* on page 46.



Touching the key “likes” the current content.

□ Depending on the content, touching [thumbs up] or [thumbs down] cancels “likes”.



Touching the key “dislikes” the current content.

□ Depending on the content, touching [thumbs up] or [thumbs down] cancels “dislikes”.



Touching the key lets you make a call to a phone number registered in the current content using the hands-free function.

⑦ Playback and pause (or stop)

Touch [▶] to start playback. Touching [⏏] during playback, pauses or stops playback.

□ Pause (or stop) key functionality depends on the content.

⑧ Connects a registered Bluetooth device manually

□ The key appears under one of following conditions:

- When “App connection settings” is set to “Android”
- When “App connection settings” is set to “iPhone”, and “iPod Connection Settings” is set to “Digital AV Connector”

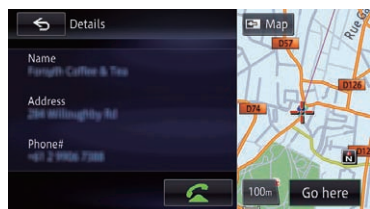
➔ For details, refer to *Starting procedure* on page 115. □

Functions coupled with Aha Radio and the navigation system

Depending on the stations, functions coupled with the navigation system may also be.

Viewing POI information with Aha Radio

You can check the information of POI location when setting to the destination the POI location obtained with Aha Radio.



- ➡ For details, refer to *Viewing information about a specified location* on page 33.
- ❑ When you switch to the map screen while viewing the content that includes POI location information, a maximum of 30 POI icons are displayed on the map screen.
- ❑ The POI icons on the map will not disappear, even when the smartphone is removed.

The icons will disappear with the following operations:

- Turning off the ignition switch (ACC OFF)
- Initialising user data
- Updating the display of the Aha POI icons
- ❑ Aha POI icons are updated at the following intervals.
 - When a station with content including location information is reselected
 - When the content lists of the Aha application are updated
 - If there are 30 or more content items selected and the 31st POI is read ■

Using the Bluetooth audio player

You can control the Bluetooth audio player.

- ❑ Before using the Bluetooth audio player, you must register and connect the device to this navigation system.
 - ➔ For details, refer to *Registering your Bluetooth devices* on page 58.
- ❑ Operations may vary depending on the Bluetooth audio player.
- ❑ Depending on the Bluetooth audio player connected to this navigation system, the available operations with this navigation system may be limited to the following two levels:
 - A2DP (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
 - A2DP and AVRCP (Audio/Video Remote Control Profile): Playing back, pausing, selecting songs, etc., are possible.
- ❑ Since a number of Bluetooth audio players are available on the market, operations with your Bluetooth audio player using this navigation system vary considerably in range. Please refer to the instruction manual that came with your Bluetooth audio player as well as this manual while operating your player on this navigation system.
- ❑ While you are listening to songs on your Bluetooth audio player, please refrain from operating your mobile phone as much as possible. If you try operating your mobile phone, the signal may cause a noise on the song playback.
- ❑ Even if you switch to another source while listening to a song on your Bluetooth audio player, the song playback continues.
- ❑ Depending on the Bluetooth audio player you connected to this navigation system, operations on this navigation system to control the player may differ from those explained in this manual.
- ❑ When you are talking on a mobile phone connected to this unit via Bluetooth wireless technology, song playback from your Bluetooth audio player connected to this unit may be paused.

Starting procedure

1 Pull out the connecting cable for using the AppRadio Mode.

- ❑ You cannot use Bluetooth audio player when the connecting cable for using the **AppRadio Mode** is connected.

2 Display the AV operation screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

3 Touch [Bluetooth Audio] on the left edge of the screen to display the "Bluetooth Audio" screen.

- ❑ The Bluetooth device is connected when you touch **[Bluetooth Audio]**. If the Bluetooth device is not connected, touch **[Connect]**.
- ➔ For details, refer to **Connects and disconnects the Bluetooth audio player** on page 121.

4 Use the touch panel keys on the screen to control the Bluetooth audio player.

- ➔ For details, refer to *Using the touch panel keys* on page 120. ■

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **File number indicator**
Shows the file number currently playing (when available).
- ③ **Current time**

- ④ **Battery status of the Bluetooth device**
❑ Depending on the Bluetooth device, this icon may not appear.
- ⑤ **Connection status indicator**
Shows whether the device featuring Bluetooth technology is connected or not.
- ⑥ **Device name indicator**
- ⑦ **Playback condition indicator**
Indicates the current playback condition if the connected Bluetooth audio player features AVRCP 1.3.

Playing files in random order

Indicator	Meaning
	Does not play files in random order.
	Plays all audio files in the current group in random order.
	Plays all audio files in the current repeat play range in random order.

Setting a repeat play range

Indicator	Meaning
	Does not repeat.
	Repeats just the current file.
	Repeats the current group.
	Repeats all audio files in the Bluetooth audio player.

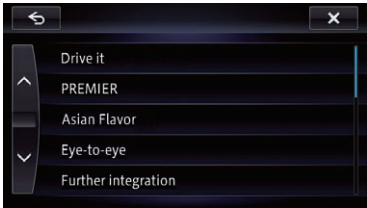
- ⑧ **Current file information**
If the connected Bluetooth audio player features AVRCP 1.3, the following file information will be displayed.
-  **Track title**
Shows the title of the track currently playing (when available).
 -  **Artist name**
Shows the artist name currently playing (when available).
 -  **Album title**
Shows the title of the album of the current file (when available).
 - **Play time indicator**

- Shows the elapsed playing time within the current file.
- ❑ In the following cases, file information will only be displayed after a file starts or resumes playing:
- You connect a Bluetooth audio player compatible with AVRCP1.3, and operate the player to start playing.
 - You select another file when playback is paused. ■

Using the touch panel keys



- ① **Selects a track from the list**
Touching this key displays the list in which you can find the track title and the folder name of Bluetooth audio player. Touching a folder on the list shows its content. You can play a track on the list by touching it.
- ❑ This function is only available when the connected Bluetooth audio player supports AVRCP 1.4.



- ② **Recalls equaliser curves**
➔ For details, refer to *Using the equaliser* on page 151.
- ③ **Switches the screen displays**

Using the Bluetooth audio player

Each touch of this key, switches between the file information screen and the list selection screen.

- ④ **Operates some functions by swipe action**
 ➔ For details, refer to *Swipe action* on page 27.
- ⑤ **Sets a repeat play range**
 The repeat play range can be changed by only touching a single key.
☐ This function is only available when the connected Bluetooth audio player supports AVRCP 1.3.
 ➔ For details, refer to **Playback condition indicator** on page 120.
- ⑥ **Displays the “Phone” screen**
 ➔ For details, refer to *Displaying the phone menu* on page 67.
- ⑦ **Plays files in random order**
 All of the files within the repeat play range can be played at random by only touching a single key.
☐ This function is only available when the connected Bluetooth audio player supports AVRCP 1.3.
 ➔ For details, refer to **Playback condition indicator** on page 120.
- ⑧ **Connects and disconnects the Bluetooth audio player**
 The Bluetooth audio player is disconnected when you touch **[Disconnect]**.
☐ If the Bluetooth audio player is not connected, touch **[Connect]** and await for the Bluetooth wireless connection.
- ⑨ **Playback and Pause**
 Touching **[▶]** or **[⏏]** switches between playback and pause. ☐

Operating by hardware buttons

Pressing the TRK button

You can skip files forward or backward.

Pressing and holding the TRK button

You can perform fast reverse or fast forward. ☐

You can display the video image output by the device connected to the navigation system. For details of the connection method, refer to the Installation Manual.



CAUTION

For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and apply the handbrake.

Reading the screen



① Source icon

Shows which source has been selected.

② Current time

Using AV1

You can display the video image output by the device connected to video input 1.

1 Turn on the setting of video input 1 (AV1).

- ➔ For details, refer to *Setting video input 1 (AV1)* on page 148.

2 Display the AV operation screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

3 Touch [AV1] on the left edge of the screen.

The image is displayed on the screen.

Using AV2

You can display the video image output by the equipment connected to video input 2.

1 Turn on the setting of video input 2 (AV2).

- ➔ For details, refer to *Setting video input 2 (AV2)* on page 148.

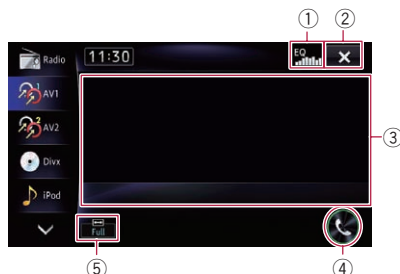
2 Display the AV operation screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

3 Touch [AV2] on the left edge of the screen.

The image is displayed on the screen.

Using the touch panel keys



① Recalls equaliser curves

- ➔ For details, refer to *Using the equaliser* on page 151.

② Hides the touch panel keys and information of the current video

Touching shows only the current video.

- ☐ If you want to display the touch panel keys and information of the current video again, touch anywhere on the LCD screen.

③ Operates some functions by swipe action

- ☐ When the video is displayed in full screen mode, the whole screen becomes a swipe response area.
- ➔ For details, refer to *Swipe action* on page 27.

④ Displays the "Phone" screen

- ➔ For details, refer to *Displaying the phone menu* on page 67.

⑤ Changing the wide screen mode

- ➔ For details, refer to *Changing the wide screen mode* on page 123.

Using AV input

Changing the wide screen mode

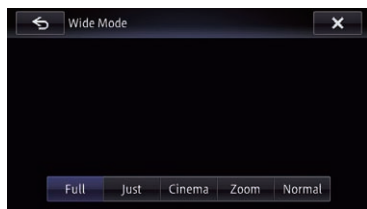
You can set the screen size of video.

- ❑ The default setting is "**Full**".

1 Touch on the "AV1" or "AV2" screen.

- ❑ The appearance of this key changes according to the current setting.

2 Touch the desired mode.



- **Full**

A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

- **Just**

The picture is enlarged slightly at the centre and the amount of enlargement increases horizontally toward the ends of the picture, enabling you to enjoy a 4:3 picture without sensing any disparity, even on a wide screen.

- **Cinema**

A picture is enlarged by the same proportion as "**Full**" or "**Zoom**" in the horizontal direction and by an intermediate proportion between "**Full**" and "**Zoom**" in the vertical direction; ideal for a cinema-sized (wide screen) picture where captions lie outside the frame.

- **Zoom**

A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized (wide screen) picture.

- **Normal**

A 4:3 picture is displayed normally, giving you no sense of disparity since its propor-

tions are the same as those of the normal picture.

- ❑ Images may be unclear when "**Cinema**" or "**Zoom**" is selected.
- ❑ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law. 

**WARNING**

Certain uses of a smartphone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions.

If in doubt as to a particular function, only perform it while the car is parked.

No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

You can control applications for iPhone and smartphone directly on the navigation screen (**AppRadio Mode**).

In **AppRadio Mode**, you can operate applications with finger gestures such as tapping, dragging, scrolling or flicking on the screen of the navigation system.

- ❑ In this chapter, the iPhone and iPod touch will be referred to as iPhone.
- ❑ The compatible finger gestures vary depending on the application for iPhone or smartphone.
- ❑ When an application not compatible with **AppRadio Mode** is started, depending on the application, you can see an image of application on the screen of this navigation system. However, you cannot operate the application.

To use the **AppRadio Mode**, install the **AppRadio app** on the iPhone or smartphone beforehand to enable launching of the application on the navigation system. For details about the **AppRadio app**, visit the following site:

<http://www.pioneer.eu/AppRadioMode>

- ❑ Be sure to read *Using app-based connected content* before you perform this operation.
 - ➡ For details, refer to *Using app-based connected content* on page 194.

- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.
- In **AppRadio Mode**, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of **AppRadio Mode** functionality is determined by the App provider, and not determined by Pioneer.
- **AppRadio Mode** allows access to applications other than those listed (subject to limitations while driving), but the extent to which content can be used is determined by the App providers.

Information for compatibility of connected devices

The following is the detailed information regarding the terminals required to use the application for iPhone or smartphone on this navigation system.

For iPhone with 30-pin connector users

- This function can be operated with the following iPhone models.
 - iPod touch 4th generation
 - iPhone 4S
 - iPhone 4
- The device has iOS 4.0 or higher.
- A USB interface cable for iPod / iPhone (sold separately) must be used to connect your iPhone to this navigation system.

For iPhone with Lightning connector users

- This function can be operated with the following iPhone models.
 - iPod touch 5th generation
 - iPhone 5
- The following cables are required for connection to this navigation system.
 - HDMI/USB interface cable for iPod / iPhone (CD-IH202) (sold separately)

Using AppRadio Mode

- Lightning Digital AV Adapter (Apple Inc. products) (sold separately)
- Lightning to USB cable (supplied with iPhone with Lightning connector)
- The device is connected to this navigation system via Bluetooth.
 - ☐ You cannot use the **AppRadio Mode** when Bluetooth wireless technology is disconnected.

For smartphone users

- The following conditions apply to the use of this function.
 - The device has Android OS 2.3 or higher.
 - The device supports Bluetooth SPP (Serial Port Profile).
 - ☐ Compatibility with all Android devices is not guaranteed.
For details about Android device compatibility with this navigation system, refer to the information on our website.
- An App Connectivity Kit (CD-AH200) (sold separately) is required for connection to this navigation system.
- The device is connected to this navigation system via Bluetooth.
 - ☐ You cannot use the **AppRadio Mode** when Bluetooth wireless technology (SPP) is disconnected. ☐

Starting procedure

The procedure varies depending on your type of device.

For iPhone with 30-pin connector users

1 Set "App connection settings" to "iPhone", and "iPod Connection Settings" to "30-pin Connector".

- For details, refer to *Selecting the device connection method* on page 157.
- For details, refer to *Setting the iPod connection* on page 149.

2 Connect your iPhone.

- For details, refer to *Connecting your iPod* on page 20.

3 Press the HOME button to display the "Top Menu" screen.

4 Touch [Apps].

A message, which notifies you that your iPhone can launch the application, appears on screen.

A message, which asks you whether you want to launch your application, appears on your iPhone.

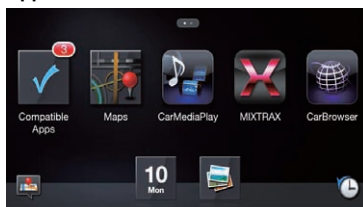
5 Use your iPhone to launch the application.

The **AppRadio app** is launched.

6 Touch [OK] on the screen of this product.

The **AppRadio Mode** screen (Application menu screen) appears.

Application menu screen



- ☐ If you connect your device while an **AppRadio Mode**-compatible application is already running, the application operation screen appears on this navigation system.

7 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

8 Operate the application.

9 Press the HOME button to go back to the application menu screen.

- ☐ If you press the **HOME** button while the application menu screen is displayed, the "Top Menu" screen appears.

For iPhone with Lightning connector users

1 Set "App connection settings" to "iPhone", and "iPod Connection Settings" to "Digital AV Connector".

- ➔ For details, refer to *Selecting the device connection method* on page 157.
- ➔ For details, refer to *Setting the iPod connection* on page 149.

2 Register your iPhone and connect it to this product via the Bluetooth wireless technology.

- ❑ The registered device must be selected as the priority device.
 - ➔ For details, refer to *Registering your Bluetooth devices* on page 58.

3 Unlock your iPhone.

4 Connect your iPhone.

- ➔ For details, refer to *Connecting your iPod on* page 20.

5 Press the HOME button to display the "Top Menu" screen.

- ❑  appears on the **Apps** key while Bluetooth wireless technology is in the process of connecting.

6 Touch [Apps].

The **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu screen) appears.

Application menu screen



- ❑ If you connect your device while an **AppRadio Mode**-compatible application is already running, the application operation screen appears on this navigation system.

7 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

8 Operate the application.

9 Press the HOME button to go back to the application menu screen.

- ❑ If you press the **HOME** button while the application menu screen is displayed, the "Top Menu" screen appears.

For smartphone users

1 Set "App connection settings" to "Android".

- ➔ For details, refer to *Selecting the device connection method* on page 157.

2 Register your smartphone and connect it to this product via the Bluetooth wireless technology.

- ❑ The registered device must be selected as the priority device.
 - ➔ For details, refer to *Registering your Bluetooth devices* on page 58.

3 Unlock your smartphone.

4 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ❑ The cable connection method varies depending on your device.
 - ➔ For details of the operations, refer to the Installation Manual.

5 Press the HOME button to display the "Top Menu" screen.

6 Touch [Apps].

The **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu screen) appears.

Using AppRadio Mode

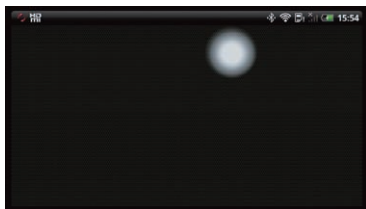
Application menu screen



- ❑ If you connect your device while an **AppRadio Mode**-compatible application is already running, the application operation screen appears on this navigation system.
- ❑ The [Apps] key icon and Bluetooth icon vary according to the condition of Bluetooth connection as follows:

Icon	Meaning
	Appears when Bluetooth wireless technology (SPP) is connected.
	Appears while Bluetooth wireless technology (SPP) is in the process of connecting.

When an Android device is first connected to this product, touch the white dot to activate the connection.



7 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

8 Operate the application.

9 Press the HOME button to go back to the application menu screen.

- ❑ If you press the **HOME** button while the application menu screen is displayed, the "Top Menu" screen appears.

- ❑ To use **AppRadio Mode** with an Android device connected to this product, you should adjust the size of the Android window on the screen of this product.

Setting the display size for the Android video playback

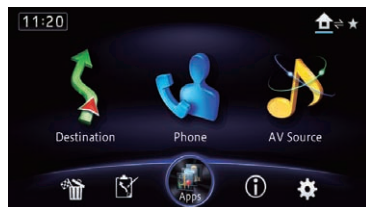
- ❑ This function is only available in **AppRadio Mode** (HDMI connection) on the Android.
 - ➔ For details of **AppRadio Mode**, refer to Chapter 25.

You can change the size of Android video image to fit it to the screen.

1 Display the AppRadio Mode screen.

2 Press the HOME button to display the "Top Menu" screen.

3 Touch .



The "Edit/Settings" screen appears.

4 Touch [App settings].

The "App settings" menu appears.

5 Touch [Android Video Adj.].

6 Touch the item to adjust the size of the Android window. .

Using the keyboard

⚠ CAUTION

For your safety, the keyboard functionality is only available when the vehicle is stopped and the handbrake is engaged.

- ❑ This function is only available in **AppRadio Mode** on the iPhone.

When you tap the text input area of an application for iPhone, a keyboard will be displayed on-screen. You can input the desired text directly from this navigation system.

- ❑ The language preference for the keyboard of this navigation system should be same as the setting on your iPhone.
If the settings for this product and the iPhone are different, you may be unable to enter characters properly.

1 Set the keyboard language.

- For details of the operations, refer to *Setting the keyboard language with application for iPhone* on page 158.

2 Start up the AppRadio Mode.

- For details, refer to *Starting procedure* on page 125.

3 Touch the text input area on the application operation screen.

A keyboard for entering text appears.



- ① Enters the characters
- ② Deletes the input text one letter at a time, beginning at the end of the text
- ③ Confirms the entry and allows you to proceed to the next step

- ④ Hides the keyboard and text can now be entered using the keyboard of iPhone
- ⑤ Changes the iPhone keyboard layout
 - ❑ The iPhone keyboard layouts that can be selected by tapping depends on the setting of Hardware Keyboard Layout of your iPhone.
- ⑥ Switches to a keyboard offering numeric and symbol characters
- ⑦ Converts the case of the keyboard characters

Using the sound mix function

You can output sound mixing AV source and an application for iPhone or smartphone when the **AppRadio Mode** is used.

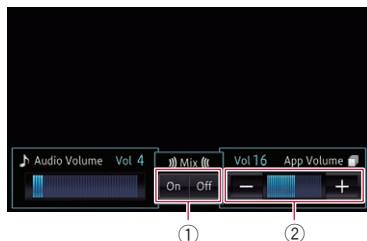
- ❑ Mixing the sound of **iPod** with that of an application cannot be done with an iPhone.
- ❑ When "**iPod Connection Settings**" is set to "**30-pin Connector**", you cannot mix the sound of **USB** with that of an application.
- ❑ You cannot mix the sound of **Bluetooth Audio** with that of an application.

1 Start up the AppRadio Mode.

- For details, refer to *Starting procedure* on page 125.

2 Press the VOL (+/-) button.

The sound mix menu will be displayed on-screen.



- ① Sets whether to switch the sound mix function on or off
 - **Off** (default):
The sound mix function is disabled.
 - **On:**

Using AppRadio Mode

The sound mix function is enabled.

② Adjusts the AppRadio Mode volume

Each touch of [+] or [-] increases or decreases the volume level. 

Other functions

Displaying the image of your application (iPhone with 30-pin connector)

You can set an image of the application for iPhone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- ☐ Depending on the type of application, you may not be able to see the image on screen.
- ☐ You can only control the application on the connected device.

1 Connect your iPhone.

➔ For details, refer to *Connecting your iPod* on page 20.

2 Press the HOME button to display the "Top Menu" screen.

3 Touch [Apps].

A message, which notifies you that your iPhone can launch the application, appears on screen.

A message, which asks you whether you want to launch your application, appears on your iPhone.

4 Use your iPhone to refuse to launch the application.

5 Touch [OK] on the screen of this product.

The black screen appears.

6 Launch an application on your iPhone.

An image of the application appears on the screen.

7 Press the HOME button to return to the "Top Menu" screen.

Displaying the image of your application (iPhone with Lightning connector)

You can set an image of the application for smartphone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- ☐ Depending on the type of application, you may not be able to see the image on screen.
- ☐ When you use this function, do not connect other devices via Bluetooth wireless technology. Be sure to disconnect your Bluetooth device before using this function.
- ☐ You can only control the application on the connected device.

1 Connect your iPhone.

➔ For details, refer to *Connecting your iPod* on page 20.

2 Press the HOME button to display the "Top Menu" screen.

3 Touch [Apps].

The image in your iPhone appears on the screen.

4 Launch an application on your iPhone.

An image of the application appears on the screen.

5 Press the HOME button to return to the "Top Menu" screen.

Displaying the image of your application (smartphone)

You can set an image of the application for smartphone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- ☐ Compatibility with all smartphones is not guaranteed.
- ☐ When you use this function, do not connect other devices via Bluetooth wireless technology. Be sure to disconnect your Bluetooth device before using this function.

- ❑ You can only control the application on the connected device.

1 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ❑ The cable connection method varies depending on your device.
- ➡ For details of the operations, refer to the Installation Manual.

2 Press the HOME button to display the “Top Menu” screen.

3 Touch [Apps].

The image in your smartphone appears on the screen.

4 Launch an application on your smartphone.

An image of the application appears on the screen.

5 Press the HOME button to return to the “Top Menu” screen. [■]

Customising preferences

Displaying the information screen

1 Press the HOME button to display the "Top Menu" screen.

2 Touch .

The "Information" screen appears.

3 Touch the item you want to configure.



Checking the connections of leads

Check that leads are properly connected between the navigation system and vehicle. Please also check whether they are connected in the correct positions.

1 Display the "Information" screen.

➔ For details, refer to *Displaying the information screen* on page 131.

2 Touch [Navigation Info].

The "Navigation Info" screen appears.

3 Touch [Connection Status].



① **Speed Pulse**

The Speed Pulse value detected by the navigation system is shown. "0" is shown while the vehicle is stationary.

② **Illumination**

When the headlights or small lamps of a vehicle are on, "On" is displayed. When the small lamps of a vehicle are off, "Off" is displayed. (If the orange/white lead is not connected, "Off" appears.)

③ **Back Signal**

When the gear stick is shifted to "R", the signal switches to "High" or "Low". (One of these is displayed depending on the vehicle.)

④ **Handbrake**

When the handbrake is applied, "On" is displayed. When the handbrake is released, "Off" is displayed.

⑤ **Vehicle Bus**

When the optional Vehicle Bus adapter is connected, "Connected" is displayed. If not connected, "-" is displayed.

⑥ **GPS Antenna**

Indicates the connection status of the GPS aerial, the reception sensitivity, and from how many satellites the signal is received.

Colour	Signal communication	Used in positioning
Orange	Yes	Yes
Yellow	Yes	No

- ❑ When the GPS aerial is connected to this navigation system, “OK” is displayed. When the GPS aerial is not connected to this navigation system, “NOK” is displayed.
- ❑ If reception is poor, please change the installation position of the GPS aerial.

⑦ Installation

The installation position of the navigation system is shown. If installed correctly, “OK” appears. Indicates whether the installation position of the navigation system is correct or not. When the navigation system is installed at an extreme angle exceeding the limitation of the installing angle, “NG” will be displayed. When the angle of the navigation system has been changed, “NG” will be displayed.

⑧ Bluetooth 1

The name of the connected Bluetooth device, Bluetooth device address and name of the profile in use are displayed. The electric wave condition between this product and the Bluetooth device is shown in the illustration.

⑨ Bluetooth 2

The name of the connected Bluetooth device, Bluetooth device address and name of the profile in use are displayed. The electric wave condition between this product and the Bluetooth device is shown in the illustration.

⑩ Bluetooth 3

The name of the connected Bluetooth device, Bluetooth device address and name of the profile in use are displayed. The electric wave condition between this product and the Bluetooth device is shown in the illustration. ■

Checking sensor learning status and driving status

- ❑ The navigation system can automatically use its sensor memory based on the outer dimensions of the tyres.

1 Display the “Information” screen.

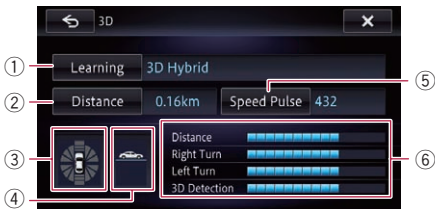
- For details, refer to *Displaying the information screen* on page 131.

2 Touch [Navigation Info].

The “Navigation Info” screen appears.

3 Touch [3D Calibration Status].

The “3D Calibration Status” screen appears.



① Learning

Indicates the current driving mode.

② Distance

Indicates driving distance.

③ Acceleration or deceleration/Rotational speed

Indicates the acceleration or deceleration velocity of your vehicle. Also, the rotational speed when your vehicle turns to the left or right is shown.

④ Inclination

Indicates the incline of the street that you are currently on.

⑤ Speed Pulse

Indicates the total number of speed pulses.

⑥ Degree of learning

Sensor learning situations for distance (**Distance**), right turn (**Right Turn**), left turn (**Left Turn**) and 3D detection (**3D Detection**) are indicated by the length of bars.

Customising preferences

- ❑ When tyres have been changed or chains fitted, turning on the Speed Pulse allows the system to detect the fact that the tyre diameter has changed, and automatically replaces the value for calculating distance.
- ❑ If a separately sold speed pulse generator (ND-PG1) is connected, the distance calculation value cannot be replaced automatically.

Clearing status

You can delete the learned results stored in "Distance", "Speed Pulse" or "Learning".

1 Touch [Distance] or [Speed Pulse].

The following message appears.



2 Touch [Yes].

Clears the results stored in "Distance" or "Speed Pulse".

3 Touch [Learning].

4 Touch [Reset all].

Clears all leaning results.

- ❑ Touch [Reset all] for the following cases:
 - After changing the installation position of the navigation system
 - After changing the installation angle of the navigation system
 - After moving the navigation system to another vehicle
- If you touch [Reset distance], all learned results stored in "Distance" are cleared. ■

Checking the device number

1 Display the "Information" screen.

- ➔ For details, refer to *Displaying the information screen* on page 131.

2 Touch [Navigation Info].

The device number of your navigation system is displayed.

3 Check the device number. ■

Checking the version information

1 Display the "Information" screen.

- ➔ For details, refer to *Displaying the information screen* on page 131.

2 Touch [Version Information].

The current version is displayed.

3 Check the version information.

4 Touch [OK]. ■

Registering your home

Registering your home position saves time and effort. Also, routes to home positions can be calculated easily with a single touch of the key from the "Destination". The registered home position can also be modified later.

- ❑ If your home has been already registered, delete the registered home location first.
 - ➔ For details, refer to *Deleting registered contacts* on page 72.

1 Search for a location.

- ➔ For details, refer to Chapter 4.

After searching for a point, the map of the selected position is displayed.

2 Press the HOME button to display the "Top Menu" screen.

3 Touch [Destination].

4 Touch [Home].

If the home location has not been stored yet, a confirmation message appears.

5 Touch [Yes].

The registration is complete.

- ❑ If your home location has been newly registered, the name “Home” and home mark are automatically entered.
- ❑ You can change your home position.
 - For details, refer to *Editing registered locations* on page 52. ■

Displaying the adjustment and correction screen

1 Press the HOME button to display the “Top Menu” screen.

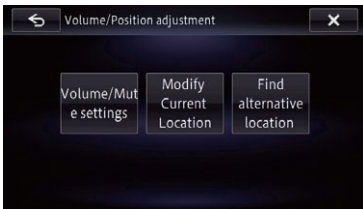
2 Touch .

The “Edit/Settings” menu appears.

3 Touch [Vol./Pos. Adj.].

The “Volume/Position adjustment” screen appears.

4 Touch the item you want to configure.



Switching the muting/attenuation timing

You can mute the AV source volume or attenuate the output signal.

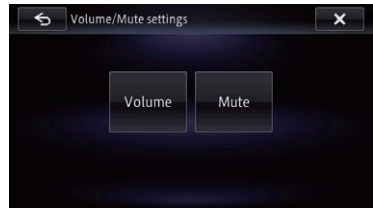
1 Display the “Volume/Position adjustment” screen.

- For details, refer to *Displaying the adjustment and correction screen* on page 134.

2 Touch [Volume/Mute settings].

The “Volume/Mute settings” screen appears.

3 Touch [Mute].



4 Touch the item you want to configure.



- **Guide/Tel:**

The volume is muted or attenuated according to the following conditions.

- When the navigation outputs the guidance voice.
- When you use a mobile phone via Bluetooth technology (dialling, talking, incoming call).

- **Tel:**

The volume is muted or attenuated when you use a mobile phone via Bluetooth technology (dialling, talking, incoming call).

- **Off:**

The volume does not change. ■

Customising preferences

Switching the muting/attenuation level

You can select the muting/attenuation level of “**Mute Timing**”. This setting is also effective for a mute signal that has been received from the MUTE lead connected to the navigation unit.

- ☐ This menu is not available when “**Mute Timing**” is “**Off**”.

1 Display the “Volume/Position adjustment” screen.

- ➔ For details, refer to *Displaying the adjustment and correction screen* on page 134.

2 Touch [Volume/Mute settings].

The “**Volume/Mute settings**” screen appears.

3 Touch [Mute].

4 Touch the item you want to configure.

- **-20dB:**
The volume becomes 1/10.
- **-10dB:**
The volume becomes 1/3.
- **Mute:**
The volume becomes 0. ☐

Setting the Volume for Guidance and Phone

The sound volume for the navigation can be set. You can separately set the volume of the route guidance and the beep sound.

1 Display the “Volume/Position adjustment” screen.

- ➔ For details, refer to *Displaying the adjustment and correction screen* on page 134.

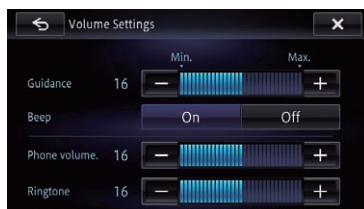
2 Touch [Volume/Mute settings].

The “**Volume/Mute settings**” screen appears.

3 Touch [Volume Settings].

The “**Volume Settings**” screen appears.

4 Touch [+] or [-] to set their volume.



On this screen, you can operate the following items.

- **Guidance**
This setting controls the guidance volume of navigation.
- **Phone volume.**
This setting controls the incoming voice volume.
- **Ringtone**
This setting controls the incoming ring tone volume.
- ☐ “**Ringtone**” and “**Phone volume.**” adjustments are needed only when a mobile phone featuring Bluetooth technology is connected.
- If you touch the key next to “**Beep**”, the setting is changed.
 - **On** (default):
A beep sounds.
 - **Off:**
The beep sound is muted. ☐

Correcting the current location

Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

1 Display the “Volume/Position adjustment” screen.

- ➔ For details, refer to *Displaying the adjustment and correction screen* on page 134.

2 Touch [Modify Current Location].

3 Scroll to the position where you want to set, then touch [OK].

4 Touch the arrow key on the screen to set the direction, then touch [OK]. ☐

Switching the road on which you are driving

When you are driving in the area where an ordinary road and toll road run parallel, and if the system calculates your vehicle position to be on a road opposite from the one on which you are actually driving, you can switch your vehicle position to the right road, i.e. either the ordinary road or the toll road.

1 Display the “Volume/Position adjustment” screen.

➤ For details, refer to *Displaying the adjustment and correction screen* on page 134.

2 Touch [Find alternative location].

The vehicle position is corrected to the right type of road.

- ☐ The vehicle position may not be corrected in some cases.
- ☐ During the route guidance, the vehicle position is corrected before the route is searched again. 

Displaying the screen for navigation function settings

1 Press the HOME button to display the “Top Menu” screen.

2 Touch .

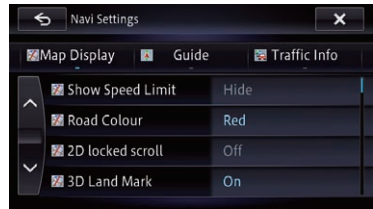
The “Edit/Settings” menu appears.

3 Touch [Navi settings].



The “Navi Settings” menu appears.

4 Touch the item you want to configure.



5 Touch to end the setup.

Setting the speed limit display

Selects whether to display or hide the speed limit of the current road.



Speed Limit

1 Display the “Navi Settings” screen.

➤ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [Show Speed Limit].

The setting screen appears.

4 Touch the item you want to set.

- **Hide** (default):
Hides the speed limit on the map.
- **View:**
Displays the speed limit on the map.

Changing the road colour

You can set the road colour to bluish or red-dish.

1 Display the “Navi Settings” screen.

➤ For details, refer to *Displaying the screen for navigation function settings* on page 136.

Customising preferences

2 Touch [Map Display].

3 Touch [Road Colour].

The setting screen appears.

4 Touch the item you want to set.

- **Red** (default):
Changes to red based road colours.
- **Blue**:
Changes to blue based road colours.

Setting the scroll-Locked 2D (Normal) View

You can select whether to lock the normal view when you scroll the screen.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [2D locked scroll].

The setting screen appears.

4 Touch the item you want to set.

- **Off** (default):
Does not lock the normal view when you scroll the screen.
- **On**:
Locks the normal view when you scroll the screen.

Displaying the 3D landmarks

- ☐ The 3D landmarks and this setting are only available on AVIC-F50BT.

You can select whether to display the 3D landmarks on the map.

- ☐ 3D landmarks only appear when the view mode is “**3D View**” and the map scale is set to 200 m (0.25 mile) or lower.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [3D Land Mark].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Displays the 3D landmark on the map.
- **Off**:
Hides the 3D landmark on the map.

Setting the detailed city map

- ☐ This function is only available on AVIC-F50BT.

You can select whether to display the city map when in certain metropolitan city areas.

- ☐ The city map is displayed when the map scale is 50 metres (0.05 mile) or less.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [City Map].

The setting screen appears.

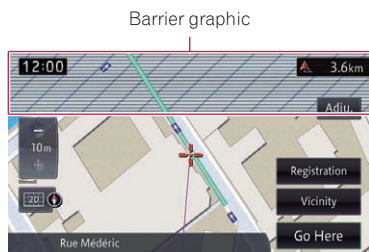
4 Touch the item you want to set.

- **On** (default):
Automatically switches to the city map when in a city map area.
- **Off**:
Does not show the city map.
 - ☐ Even if you switch “**City Map**” to “**On**”, the city map cannot be displayed in areas where there is no city map data.

Setting the barrier graphic for the city map

- ❑ This function is only available on AVIC-F50BT.

On the city map screen, you can display a "barrier graphic" pattern where no city map data is available. This prevents a normal map of a different scale from being displayed at the same time, considerably enhancing the clarity of the city map on screen.



1 Display the "Navi Settings" screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [City Map Barrier].

The setting screen appears.

4 Touch the item you want to set.

- **On (default):**
Displays the barrier graphic for the city map.
When the vehicle position or cursor enters the barrier graphic area, the graphic disappears and a normal map is displayed in full screen mode.
- **Off:**
Does not display the barrier graphic for the city map. When the vehicle position or cursor enters the area where no city map data is available, a normal map is displayed in full screen mode.

Setting the map colour change between day and night

To improve the visibility of the map during the evening, you can set the timing for changing the combination of the map colour.

1 Display the "Navi Settings" screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [Day/Night Display].

The setting screen appears.

4 Touch the item you want to set.

- **Automatic (default):**
You can change the colours of a map between daytime and nighttime according to whether the vehicle lights are on or off.
- **Day:**
The map is always displayed with daytime colours.
- ❑ To use this function with "Automatic", the orange/white lead of the navigation system must be connected correctly.

Displaying the track log

You can select whether to display the track log on the map.

1 Display the "Navi Settings" screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [Display travel log].

The setting screen appears.

4 Touch the item you want to set.

- **On (default):**
Displays the track log on the screen.
- **Off:**
Does not display the track log on the screen.

Customising preferences

Deleting the track log automatically

You can delete the track log automatically.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [Trav Log Auto Del.].

The setting screen appears.

4 Touch the item you want to set.

- **Off** (default):
Does not delete the track log automatically.
- **Near Home:**
After you turn off power of this product (turn off the engine) at a location within 100 m from registered your home, the track log is deleted automatically.
- **At Power Off:**
After you turn off power of this product (turn off the engine), the track log is deleted automatically.

Setting the current street name display

Selects whether to display or hide the street name (or city name) that your vehicle is traveling along.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Map Display].

3 Touch [Current location info.].

The setting screen appears.

4 Touch the item you want to set.

- **Street Name** (default):
Displays the street name (or city name) on the map.
- **Coordinates:**
The current position is displayed in latitude and longitude.

Setting the criteria of route calculation

You can predefine the route calculation criteria. This setting controls how the route should be calculated by taking into account the time, distance or main road. Determines which condition takes priority for route calculation.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Route Condition].

The setting screen appears.

4 Touch the item you want to set.

- **Fast** (default):
Calculates a route with the shortest travel time to your destination as a priority.
- **Short:**
Calculates a route with the shortest distance to your destination as a priority.
- **Main Road:**
Calculates a route that passes major arterial roads as a priority.

Setting the use of toll roads

You can predefine the use of toll roads when calculating a route. This setting controls whether toll roads (including toll areas) should be taken into account.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Toll road].

The setting screen appears.

4 Touch the item you want to set.

- **Use** (default):
Calculates a route that may include toll roads in a standard criteria.
- **Avoid:**
Calculates a route that avoids toll roads.

Setting the use of ferries

You can predefine the use of ferries when calculating a route. This setting controls whether ferry crossings should be taken into account.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Ferry].

The setting screen appears.

4 Touch the item you want to set.

- **Use** (default):
Calculates a route that may include ferries in a standard criteria.
- **Avoid:**
Calculates a route that avoids ferries.

Setting the route calculation by learning route

The system learns the travel history of your vehicle for each road.

This setting controls whether or not the travel history should be taken into account.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Learning Route].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Calculates a route with the travel history taken into account.
- **Off:**
Calculates a route without the travel history taken into account.

Setting the route calculation allowing for time restrictions

This setting controls whether streets or bridges that have traffic restrictions during a certain time should be taken into account.



CAUTION

If the time difference is not set correctly, the navigation system cannot consider traffic regulations correctly. Set the time difference correctly.

- ➔ For details, refer to *Setting the time difference* on page 144.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Time restrictions].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Calculates a route while avoiding streets or bridges with traffic restrictions during a certain time.
- **Off:**
Calculates a route while ignoring traffic restrictions.
- ☐ If you want to set your route to avoid raised draw bridges, select “On”.
- ☐ The system may calculate a route that includes streets or bridges that are subject to traffic restrictions during a certain time even if “On” is selected.

Setting the use of motorways

You can predefine the use of motorways when calculating a route.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

Customising preferences

3 Touch [Motorway].

The setting screen appears.

4 Touch the item you want to set.

- **Use** (default):
Calculates a route that may include motorways in a standard criteria.
- **Avoid:**
Calculates a route that avoids motorways.

Setting to select your route automatically using the route alternatives function

You can set in advance a new route and the current route you select when the navigation system recommends a new alternative route automatically and no selection is made.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Auto reroute choice].

The setting screen appears.

4 Touch the item you want to set.

- **Current route** (default):
Selects the current route.
- **Alternative Route:**
Selects an alternative route.

Displaying the distance and estimated time

You can set the display information of the estimated time of arrival in the route guidance.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Distance/ETA].

The setting screen appears.

4 Touch the item you want to set.

- **Destination** (default):
Displays the distance and the progress to the destination, elapsed time and the estimated time of arrival.
- **Waypoint:**
Displays the distance and the progress to the next waypoint, elapsed time and the estimated time of arrival.

Setting the route alternatives function to avoid traffic jams and closed/blocked roads

When both “**Traffic avoidance**” and “**Auto reroute**” are set to “**On**”, this navigation system can calculate a route allowing for traffic jams and closed/blocked roads when the system acquires traffic information.

1 Display the “Navi Settings” screen.

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Traffic avoidance] and [Auto reroute].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Suggests an alternative route to avoid events on the route.
- **Off:**
Does not calculate a route automatically.

Setting the auto-zoom display

This setting enables switching to an enlarged map around the point where your vehicle is approaching an intersection, entrance/exit of motorway or a junction.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Close Up View].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Switches to an enlarged map.
- **Off**:
Does not switch to an enlarged map.

Changing the setting of the navigation interruption screen

You can set whether to automatically switch to the navigation screen from the AV screen when your vehicle approaches a guidance point such as an intersection.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [AV Guide Mode].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Switches from the AV operation screen to the map screen.
- **Off**:
Does not switch the screen.
- ☐ This setting is effective only when “Close Up View” is set to “On”.

Setting the App operation screen interruption

You can set whether to automatically switch to the navigation screen from the **AppRadio Mode** screen.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [App Guide Mode].

The setting screen appears.

4 Touch the item you want to set.

- **On** (default):
Switches from the App operation screen to the map screen.
- **Off**:
Does not switch the screen.

Changing the virtual speed of the vehicle

You can set the average speed for the ordinary road or motorway to calculate the estimated time of arrival.

- ☐ This setting is enabled if the route calculation does not take account of traffic jams.
 - For details, refer to *Setting the route alternatives function to avoid traffic jams and closed/blocked roads* on page 141.

1 Display the “Navi Settings” screen.

- For details, refer to *Displaying the screen for navigation function settings* on page 136.

2 Touch [Guide].

3 Touch [Minor Ordinary Road], [Major Ordinary Road] or [Motorway].

The setting screen appears.

4 Touch the item you want to set.

The estimated time of arrival is calculated based on the average speed you set. The average speed you can select for each kind of road is as follows.

Minor Ordinary Road

- km:

Customising preferences

20km/h, 30km/h, 40km/h (default),
50km/h, 60km/h

- **mile** or **Mile&Yard**:
10mph, 20mph, 25mph (default), 30mph,
40mph

Major Ordinary Road

- **km**:
50km/h, 60km/h, 70km/h (default),
80km/h, 90km/h
- **mile** or **Mile&Yard**:
30mph, 40mph, 45mph (default), 50mph,
55mph

Motorway

- **km**:
90km/h, 100km/h (default), 110km/h,
120km/h, 130km/h
- **mile** or **Mile&Yard**:
55mph, 60mph (default), 70mph, 75mph,
80mph

- ☐ The unit may vary depending on the settings.
➔ For details, refer to *Changing the unit between km and miles* on page 143.
- ☐ The estimated time of arrival may not take into account parameters other than this speed value.

Changing the unit between km and miles

This setting controls the unit of distance and speed displayed on your navigation system.

- 1 **Display the “Navi Settings” screen.**
➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

- 2 **Touch [Guide].**

- 3 **Touch [km / mile].**

The setting screen appears.

- 4 **Touch the item you want to set.**

- **km** (default):
Shows distance in kilometres.
- **mile**:
Shows distance in miles.
- **Mile&Yard**:
Shows distance in miles and yards.

Displaying the traffic notification icon

Selects whether to display or hide the traffic notification icons on the map when incidents occur on your route.

- 1 **Display the “Navi Settings” screen.**

- ➔ For details, refer to *Displaying the screen for navigation function settings* on page 136.

- 2 **Touch [Traffic Info].**

- 3 **Touch [Traffic].**

The setting screen appears.

- 4 **Touch the item you want to set.**

- **On** (default):
Displays the icons on the map.
- **Off**:
Hides the icons on the map. ☐

Changing the view mode

Various types of screen displays can be selected for navigation guidance.

- ➔ For details of the operation, refer to *Switching the view mode* on page 34. ☐

Displaying the screen for system settings

- 1 **Press the HOME button to display the “Top Menu” screen.**

- 2 **Touch .**

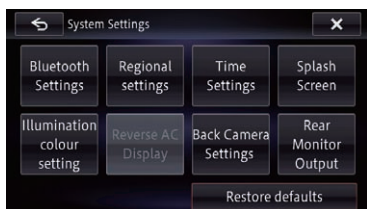
The “Edit/Settings” menu appears.

- 3 **Touch [System Settings].**



The “System Settings” screen appears.

4 Touch the item you want to configure.



Selecting the language

You can set the languages used on the programme and voice guidance. Each language can be set separately.

1 Display the “System Settings” screen.

- ➔ For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Regional settings].

The “Language settings” screen appears.

3 Touch [Program Language].

The “Select programme language” screen appears.

4 Touch the desired language.

After the language is selected, the previous screen returns.

5 Touch [Voice Language].

The “Select voice language” screen appears.

6 Touch the desired language.

After the language is selected, the previous screen returns.

7 Touch on the “Language settings” screen.

A message confirming whether to restart the navigation system appears.

8 Touch [Yes].

The navigation system restarts.

- If you press the **MODE**, **MAP**, or **HOME** button, the setting procedure is cancelled.

Setting the time difference

Adjusts the system’s clock. Set the time difference (+, –) from the time originally set in your navigation system.

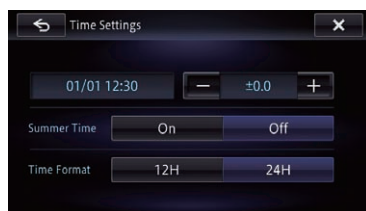
1 Display the “System Settings” screen.

- ➔ For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Time Settings].

The “Time Settings” screen appears.

3 To set the time difference, touch [+], or [–], [On] or [Off], or [12H] or [24H].



On this screen, you can operate the following items.

- **+, –**
Adjusts time for the summer time.
- **Summer Time**
Turns the summer time on or off.
Off (default):
Changes the summer time setting to off.
On:
Changes the summer time setting to on.
- **Time Format**
24H (default):
Changes the display to 24-hour format.
12H:
Changes the display to 12-hour format with am/pm.

Changing the preinstalled splash screen

You can change the splash screen to other images preinstalled in the navigation system.

1 Display the “System Settings” screen.

- ➔ For details, refer to *Displaying the screen for system settings* on page 143.

Customising preferences

2 Touch [Splash Screen Setting].

The "Select Splash Screen" screen appears.

3 Touch the image to use as the splash screen from the list.

The image is displayed on the screen.

- If you touch [Show image], you can confirm a selected image via full screen preview. Touch the screen to return to the "Select Splash Screen".

4 Touch [OK].

The image is set as the splash screen, and the map screen returns.

Changing to the splash screen stored on the SD memory card

You can change the splash screen to other images imported from the SD memory card.

- ☐ Splash screen images must be used within the following formats.
 - BMP or JPEG files
 - Allowable data size is 6 MB or smaller
- ☐ The best image size is 800 pixels x 480 pixels.
- ☐ Proper compatibility with allowable files is not guaranteed.
- ☐ Imported original images will be stored in the built-in memory, but the ability to save these images cannot be guaranteed completely. If your original image data is deleted, insert the SD memory card again and re-import the original image.
- ☐ The maximum number of images, including those in the built-in memory, that can be imported and displayed on the list is 10.

1 Create a folder named "Pictures" in the top-most directory of the SD memory card.

2 Store the picture files in the "Pictures" folder.

3 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting and ejecting an SD memory card* on page 18.

4 Display the "System Settings" screen.

- ➔ For details, refer to *Displaying the screen for system settings* on page 143.

5 Touch [Splash Screen Setting].

The "Select Splash Screen" screen appears.

6 Touch [Load from SD].

A message confirming whether to start loading files appears.

- **Yes:**
Starts importing the files into the navigation system.
- **No:**
Returns you to the previous screen.

The "Select Splash Screen" screen appears.

7 Touch the image to use as the splash screen from the list.

The image is displayed on the screen.

8 Touch [OK].

The image is set as the splash screen, and the map screen returns.

- ☐ Images imported from the SD memory card are added to the list on "Select Splash Screen".

Adjusting the response positions of the touch panel (touch panel calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel screen.

- ☐ Do not use sharp pointed tools such as a ballpoint or mechanical pen, which could damage the screen.

1 Press and hold the MODE button.

The picture adjustment screen appears.

2 Press and hold the MODE button while the picture adjustment screen is still displayed.

The touch panel adjustment screen appears.

3 Touch two corner of the screen along the allows, and then touch two centre of + mark at the same time twice.

4 Press the MODE button.

The adjustment results are saved.

5 Press the MODE button once again.

Proceed to the 16-point adjustment.

6 Gently touch the centre of the + mark displayed on the screen.

The target indicates the order.

After you touch all marks, the adjusted position data is saved.

- ☐ Do not turn off the engine while saving the adjusted position data.
- If you press the **MODE** button, the previous adjustment position returns.
- If you press and hold the **MODE** button, the adjustment is cancelled.

Setting the illumination colour

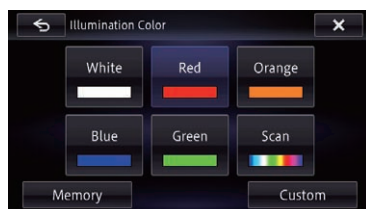
The illumination colour can be selected from 5 different colours. Furthermore, the illumination can be switched between these 5 colours in order.

Selecting the colour from the preset colours**1 Display the “System Settings” screen.**

- For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Illumi Colour Setting].

The “Illumi Colour Setting” screen appears.

3 Touch the colour you want.

Available options:

- **Coloured keys:**
Selects the desired preset colour.
- **Memory:**
Selects the registered colour in the memory.
- **Scan:**
Shifts gradually between the five default colours in sequence.
- **Custom:**
Displays the “Illumination Color” screen. You can customise the illumination colour.
➤ For details, refer to *Creating a user-defined colour and storing it to memory* on page 146.

Creating a user-defined colour and storing it to memory

You can create a user-defined colour and set it as the illumination colour.

1 Display the “System Settings” screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Illumi Colour Setting].

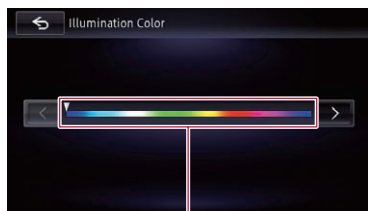
The “Illumi Colour Setting” screen appears.

3 Touch [Custom].

The “Illumination Color” screen appears.

Customising preferences

- 4 Touch **◀** or **▶** to adjust the values for Red, Green and Blue to create a favourite colour.



Colour bar

- You can adjust the colour tone by dragging the colour bar.
- Watch the illumination of the hardware buttons while adjusting the colour.

- 5 Touch **◀**.

The previous screen returns.

Reversing the climate control status display

If the left/right display of the climate control status screen does not match that of the vehicle, the display can be reversed.

- To configure this setting, the optional Vehicle Bus adapter must be connected.
- For details of the operations, refer to *Displaying the operating status of the climate control panel* on page 164.

- 1 Display the “System Settings” screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

- 2 Touch [Reverse AC Display].

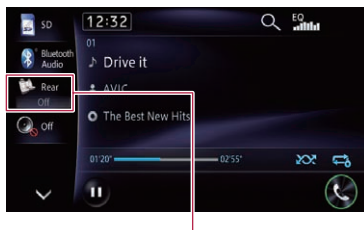
The “Reverse AC Display” screen appears.

- 3 Touch [On] or [Off].

- Off** (default):
The climate control status display is not reversed.
- On**:
The climate control status display is reversed.

Displaying the icon for setting the rear display output

You can display the icon to select which source will be displayed on the rear display.



Icon of output to select which setting of the rear display

- For details, refer to *Selecting the video for rear display* on page 160.

- 1 Display the “System Settings” screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

- 2 Touch [Rear Monitor Output].

The “Rear Video Output” screen appears.

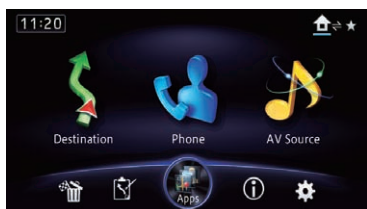
- 3 Touch [On] or [Off].

- Off** (default):
The icon of the output setting of the rear display disappears.
- On**:
The icon of the output setting of the rear display appears. 

Displaying the screen for AV system settings

- 1 Press the HOME button to display the “Top Menu” screen.

2 Touch .



The “**Edit/Settings**” screen appears.

3 Touch [Source Settings].

The “**Setting according to source**” screen appears.

4 Touch the item you want to configure.



Setting video input 1 (AV1)

You can use outside video equipment such as portable players connected to this product with this setting.

- ❑ This setting applies to mini-jack input.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [AV Input].

3 Touch [AV1 Input].

4 Touch [On].

The connected component is enabled.

- ❑ Use “**AV1 Input**” when connecting CD-RM10 (sold separately) through the external video component.
- If you touch [Off], the setting is turned off.

Setting video input 2 (AV2)

You can use outside video equipment such as portable players connected to this product with this setting.

- ❑ This setting applies to RCA inputs (AUDIO INPUT and VIDEO INPUT) on the back of the system.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [AV Input].

3 Touch [AV2 Input].

4 Touch [On].

The connected component is enabled.

- If you touch [Off], the setting is turned off.

Changing the screen size of SD/USB video

Changes the screen size of video. If a video file is played, you can select the display mode between normal and full screen.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [SD/USB settings].

3 Touch [SD video output settings] or [Set USB video output].

4 Touch [Full] or [Normal].

- **Full** (default):
A picture is enlarged in four directions without keeping the aspect ratio and displays to the full extent of a screen.
- **Normal**:
A picture is displayed fitting to the long side of the screen while keeping the aspect ratio.

Customising preferences

Displaying your DivX VOD registration code

If you want to play DivX VOD (video on demand) content on this navigation system, you must first register the unit with your DivX VOD content provider. You do this by generating a DivX VOD registration code, which you submit to your provider.

- ☐ This feature is available when the selected source is **CD**, **ROM**, **DivX**, or **DVD-V**.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [DivX® VOD].

A screen where you can choose to display a registration code or deregistration code is displayed.

- ☐ If a registration code has already been activated, it cannot be displayed.

3 Touch [Registration Code].

Your 10-digit registration code is displayed.

- ☐ Make a note of the code as you will need it when you register with a DivX VOD provider.

Displaying your DivX VOD deregistration code

A registration code registered with a deregistration code can be deleted.

- ☐ This feature is available when the selected source is **CD**, **ROM**, **DivX**, or **DVD-V**.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [DivX® VOD].

A screen where you can choose to display a registration code or deregistration code is displayed.

- ☐ If a registration code has not been activated, the deregistration code is not displayed.

3 Touch [Deregistration Code].

Your eight-digit deregistration code is displayed.

- ☐ Make a note of the code as you will need it when you deregister with a DivX VOD provider.

Setting the iPod connection

Settings are required according to the connected device.

“iPod Connection Settings” can be set when all of the following conditions are met.

- The AV source is turned off.
- All iPod, smartphone and external storage devices are not connected to this navigation system.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [iPod Settings].

The “iPod Settings” screen appears.

3 Touch [iPod Connection Settings].

The “iPod Connection Settings” screen appears.

4 Touch [Digital AV Connector] or [30-pin Connector].

- **30-pin Connector** (default):
This setting is for iPod with 30-pin connector users and Android device users.
- **Digital AV Connector**:
This setting is for iPod with Lightning connector users.

Switching Auto PI seek

The navigation system can automatically search for a different station with the same programming, even during preset recall.

- ❑ “Auto PI” can be set only when the source is selected to “Source Off”.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [Radio settings].

3 Touch [Auto PI].

4 Touch [On] or [Off].

- **Off** (default):
Deactivates the Auto PI seek function.
- **On**:
Activates the Auto PI seek function.

Setting the FM tuning step

Normally the FM tuning step employed by seek tuning is 50 kHz. When “AF” or “TA” is on, the tuning step automatically changes to 100 kHz. But you can set the tuning step to 50 kHz when “AF” or “TA” is on.

- ❑ “FM Step” can be set only when the source is selected to “Source Off”.

1 Display the “Setting according to source” screen.

- ➔ For details, refer to *Displaying the screen for AV system settings* on page 147.

2 Touch [Radio settings].

3 Touch [FM Step].

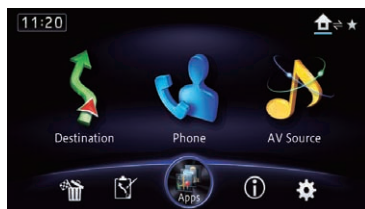
4 Touch [50kHz] or [100kHz].

- **100kHz** (default):
The FM tuning step is switched to 100 kHz.
- **50kHz**:
The FM tuning step is switched to 50 kHz.
- ❑ The tuning step remains at 50 kHz during manual tuning. 

Displaying the screen for AV sound settings

1 Press the HOME button to display the “Top Menu” screen.

2 Touch .



The “Edit/Settings” screen appears.

3 Touch [AV Settings].

The “AV Settings” menu appears.

4 Touch [AV Sound Settings].

The “AV Sound Settings” screen appears.

- ❑ You cannot make adjustments in the following situations:
 - AV source is “Source Off”.
 - During muting/attenuation

5 Touch the item you want to configure.



Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Display the “AV Sound Settings” screen.

- ➔ For details, refer to *Displaying the screen for AV sound settings* on page 150.

Customising preferences

2 Touch [FAD/BAL].

When “Sub. W” is selected in “Rear SP”, [Balance] will be displayed instead of [FAD/BAL] and the front/rear speaker balance cannot be adjusted.

- ➔ For details, refer to *Setting the rear output* on page 158.

3 Touch or to adjust front/rear speaker balance.

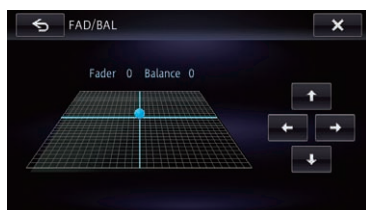
Each time you touch  or  the front/rear speaker balance moves towards the front or rear.

“Front 15” to “Rear 15” is displayed as the front/rear speaker balance moves from the front to rear.

Set “Front” and “Rear” to “0” when using a dual speaker system.

4 Touch or to adjust the left/right speaker balance.

Each time you touch  or  the left/right speaker balance moves towards the left or right.



“Left 15” to “Right 15” is displayed as the left/right speaker balance moves from left to right.

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volumes.

1 Display the “AV Sound Settings” screen.

- ➔ For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [Loudness].

3 Touch [On].

- If you touch [Off], the setting is turned off.

4 Touch or , and select the level you want to set.

Low — Mid — High

Using the equaliser

The equaliser lets you adjust equalisation to match the vehicle interior acoustic characteristics as desired.

Recalling equaliser curves

There are seven stored equaliser curves that you can easily recall at any time. Here is a list of the equaliser curves:

Equaliser curve

S.Bass (Super Bass) is a curve in which only low-pitched sound is boosted.

Powerful is a curve in which low- and high-pitched sounds are boosted.

Natural is a curve in which low- and high-pitched sounds are slightly boosted.

Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Flat is a flat curve in which nothing is boosted.

Custom1 is an adjusted equaliser curve that you create. A separate custom curve can be created for each source.

Custom2 is an adjusted equaliser curve that you create. If you select this curve, the effect is applied to all AV sources.

- ❑ When “Flat” is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equaliser curves by switching alternatively between “Flat” and a set equaliser curve.
- ❑ You cannot select “Custom1” and “Custom2” when “Auto EQ” is “On”.
 - ➔ For details, refer to *Using the auto-adjusted equaliser* on page 153.

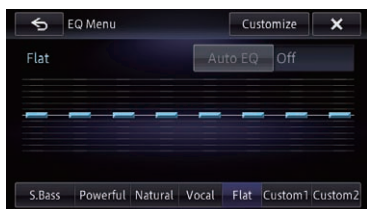
1 Display the “AV Sound Settings” screen.

- For details, refer to *Displaying the screen for AV sound settings* on page 150.

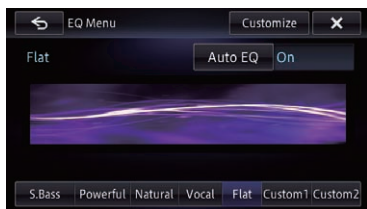
2 Touch [EQ Menu].



3 Touch the equaliser you want.



- ❑ If **Auto EQ** has been set to “On”, an image corresponding to each equaliser curve you selected appears.



- For details of the operations, refer to *Adjusting the equaliser curve automatically (Auto EQ)* on page 154.

Customising the equaliser curves

You can adjust the currently selected equaliser curve setting as desired. Adjustments can be made with a 8-band graphic equaliser.

- ❑ This function is not available when “**Auto EQ**” is “**On**”.

- For details, refer to *Using the auto-adjusted equaliser* on page 153.

The difference between “Custom1” and “Custom2”

- A separate “**Custom1**” curve can be created for each source. If you make adjustments when a curve “**S.Bass** (Super Bass)”, “**Powerful**”, “**Natural**”, “**Vocal**”, “**Flat**”, or “**Custom1**” is selected, the equaliser curve settings will be memorised in “**Custom1**”.
- A “**Custom2**” curve can be created common to all sources. If you make adjustments when the “**Custom2**” curve is selected, the “**Custom2**” curve will be updated.
- The “**Custom1**” curve is applied to each of the sources selected, but you can apply the same curve to the following sources.
 - **AV1** and **AV2**
 - **CD**, **ROM**, **DVD-V**, and **DivX**
 - **SD** and **USB**
 - **Bluetooth Audio**, **Aha Radio** (Bluetooth connection) and **AppRadio Mode** (Bluetooth connection)
 - **Aha Radio** (HDMI connection) and **AppRadio Mode** (HDMI connection)
 - **iPod**, **Aha Radio** (iPhone) and **AppRadio Mode** (iPhone)

1 Display the “AV Sound Settings” screen.

- For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [EQ Menu].

3 Touch one of the keys to select a curve that you want to use as the basis of customising.

4 Touch [Customise].

Customising preferences

5 Touch the frequency for which you want to adjust the level.



6 Touch [▲] or [▼] to adjust the level of the equaliser band.

Each time you touch [▲] or [▼], the level of the equaliser band increases or decreases.

Using the auto-adjusted equaliser

You can set the auto-adjusted equaliser to suit the vehicle's acoustics. To use this function, the vehicle's acoustics must be measured in advance.

- ➔ For details of the operations, refer to *Adjusting the equaliser curve automatically (Auto EQ)* on page 154.
- ❑ To manually adjust the equaliser curve, set "Auto EQ" to "Off".

1 Display the "AV Sound Settings" screen.

- ➔ For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [EQ Menu].

3 Touch the key next to "Auto EQ" to turn the auto-adjusted equaliser on or off.

4 Select the equaliser curve.

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- ❑ Settings are based on the FM tuner volume level, which remains unchanged.

- ❑ You cannot select **[SLA]** when the FM tuner is selected as the AV source.

1 Compare the FM tuner volume level with the level of the source you wish to adjust.

2 Display the "AV Sound Settings" screen.

- ➔ For details, refer to *Displaying the screen for AV sound settings* on page 150.

3 Touch [SLA].

4 Touch [+] or [-] to adjust the source volume.

"+8 dB" to "-8 dB" is displayed as the source volume is increased or decreased.

The following AV sources are set to the same source level adjustment volume automatically.

- **AV1** and **AV2**
- **CD, ROM, and DivX**
- **SD** and **USB**
- **Bluetooth Audio, Aha Radio** (Bluetooth connection) and **AppRadio Mode** (Bluetooth connection)
- **Aha Radio** (HDMI connection) and **AppRadio Mode** (HDMI connection)
- **iPod, Aha Radio** (iPhone) and **AppRadio Mode** (iPhone)

Using the high pass filter

When you cut lower sounds from the subwoofer output frequency, activate **HPF** (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Display the "AV Sound Settings" screen.

- ➔ For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [HPF].

3 Touch [On].

- If you touch **[Off]**, the setting is turned off.

4 Each touch of **<** or **>** changes the cut-off frequencies as follows:
50Hz — 63Hz — 80Hz — 100Hz — 125Hz

Using the subwoofer output

The navigation system is equipped with a subwoofer output mechanism, which can be turned on or off.

1 Display the “AV Sound Settings” screen.

➤ For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [Sub Woofer].

3 Confirm that the subwoofer output is turned on.

☐ The default setting is “On”.



▪ If you touch [Off], the subwoofer output is turned off.

4 Touch [Reverse] or [Normal] to select the phase of subwoofer output.

5 Touch **<** or **>** next to “Frequency(Hz)” to select cut-off frequency.

Each time you touch **<** or **>**, cut-off frequencies are selected in the following order:
50Hz — 63Hz — 80Hz — 100Hz — 125Hz
Only frequencies lower than those in the selected range are output from the subwoofer.

6 Touch [+]**>** or **<**[-] next to “Level” to adjust the output level.

“+6” to “-24” is displayed as the level is increased or decreased.

Enhancing bass (Bass Booster)

You can enhance bass sounds that are often muted by driving noise.

1 Display the “AV Sound Settings” screen.

➤ For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [Bass Booster].

3 Touch [+]**>** or **<**[-] to adjust the range from 0 to 6.

Using sonic centre control

Sound that is suited for the listening position can easily be created with this function.

1 Display the “AV Sound Settings” screen.

➤ For details, refer to *Displaying the screen for AV sound settings* on page 150.

2 Touch [Sonic Center Control].

3 Touch **<** or **>** to select a listening position.

☐ The larger the value of the range: “Left 7” to “Right 7” setting, the greater the delay of the speaker output.

☐ When “Left” is set, the left speaker output is delayed. When “Right” is set, the right speaker output is delayed. ☐

Adjusting the equaliser curve automatically (Auto EQ)

By measuring the vehicle’s acoustics, the equaliser curve can be adjusted automatically to suit the vehicle interior.

! WARNING

A loud tone (noise) may be emitted from the speakers when measuring the vehicle’s acoustics. Never perform the Auto EQ measurement while driving.

Customising preferences

CAUTION

- Thoroughly check the conditions before performing Auto EQ, as the speakers may be damaged if this is performed under the following conditions:
 - When the speakers are incorrectly connected. (For example, when a rear speaker is connected as a subwoofer output.)
 - When a speaker is connected to a power amp delivering output higher than the speaker's maximum input power capability.
- If a microphone for acoustical measurement (sold separately) is not placed in an appropriate location, the measurement tone may become loud and measurement may take a long time, resulting in battery drainage. Be sure to place the microphone in the specified location.

Before operating the Auto EQ function

- Perform Auto EQ in as quiet a place as possible, with the vehicle engine and air conditioning switched off. Also, cut power to car phones or mobile phones in the vehicle, or remove them from the vehicle before performing Auto EQ. Sounds other than the measurement tone (surrounding sounds, engine sound, telephones ringing, etc.) may prevent correct measurement of the vehicle's acoustics.
- Be sure to perform Auto EQ using the microphone for acoustical measurement (sold separately). Using another microphone may prevent measurement, or result in incorrect measurement of the vehicle's acoustics.
- To perform Auto EQ, the front speakers must be connected.
- When this navigation system is connected to a power amp with input level control, Auto EQ may be impossible if the power amp's input level is set below the standard level.

- When this navigation system is connected to a power amp with an LPF (low pass filter), turn the LPF off before performing Auto EQ. Also, set the cut-off frequency for the built-in LPF of an active subwoofer to the highest frequency.
- The distance has been calculated by computer to provide optimum delay to ensure accurate results. Do not change this value.
 - The reflected sound within the vehicle is strong and delays occur.
 - The LPF on active subwoofers or external amps delay the lower sounds.
- If an error occurs during measurement, a message appears and measurement is cancelled. Check the following before measuring the vehicle's acoustics.
 - Front speakers (left/right)
 - Rear speakers (left/right)
 - Noise
 - Microphone for acoustical measurement (sold separately)
 - Low battery

Performing Auto EQ

- ☐ Auto EQ changes the audio settings as follows:
 - **"Auto EQ"** on the **"EQ Menu"** screen is set to **"On"**.
 - ➡ For details, refer to *Using the auto-adjusted equaliser* on page 153.
 - The fader/balance settings return to the centre position.
 - ➡ For details, refer to *Using balance adjustment* on page 150.
 - The equaliser curve switches to **"Flat"**.
 - ➡ For details, refer to *Using the equaliser* on page 151.
 - The front and rear speakers will automatically be adjusted to a high pass filter setting.
- ☐ Previous settings for Auto EQ will be overwritten.
- ☐ For AVIC-F50BT users

Customising preferences

Do not press the **▲** button to open or close the panel when you are using the microphone.

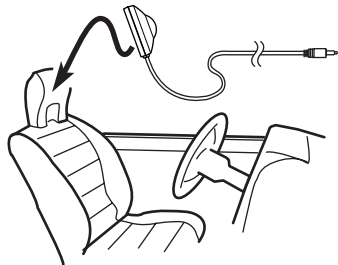
1 Stop the vehicle in a quiet place, close all the doors, windows and sun roof, and then turn the engine off.

If the engine is left running, engine noise may prevent correct Auto EQ.

- ❑ If driving restrictions are detected during measurement, measurement is cancelled.

2 Fix the microphone for acoustical measurement (sold separately) in the centre of the headrest of the driver's seat, facing forward.

The Auto EQ may differ depending on where you place the microphone. If desired, place the microphone on the front passenger seat and perform Auto EQ.



3 Disconnect the iPhone or smartphone device.

4 Turn on the ignition switch (ACC ON).

If the vehicle's air conditioner or heater is turned on, turn it off. Noise from the fan in the air conditioner or heater may prevent correct Auto EQ.

5 Switch the AV source to "Source Off".

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 76.

6 Set the video setting for the rear display to "Mirror AV".

- ➔ For details of the operations, refer to *Selecting the video for rear display* on page 160.

7 Press the HOME button to display the "Top Menu" screen.

8 Touch **⚙**.

The "Edit/Settings" screen appears.

9 Touch [AV Settings].

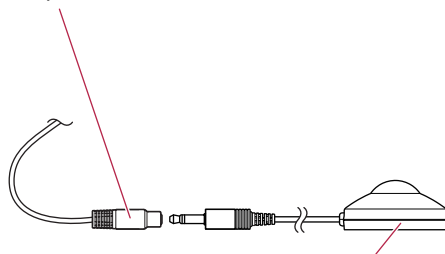
The "AV Settings" menu appears.

10 Touch [Auto EQ Measurement].

The "Auto EQ Measurement" screen appears.

11 Plug the microphone into the mini-jack connector.

Mini-jack of the RCA connector



Microphone for acoustical measurement (sold separately)

12 Touch [Start].

A 10-second countdown starts.

13 Exit the vehicle and keep the door closed until the countdown finishes.

When the countdown is over, a measurement tone (noise) is emitted from the speakers and the Auto EQ measurement begins.

14 Wait until the measurement is completed.

When Auto EQ is completed, a message is displayed indicating that the measurement is completed.

- ❑ If the vehicle's acoustics cannot be measured correctly, an error message will be displayed.
- ❑ The measurement time varies depending on the type of vehicle.
- ❑ To stop the measurement, touch [Stop].

Customising preferences

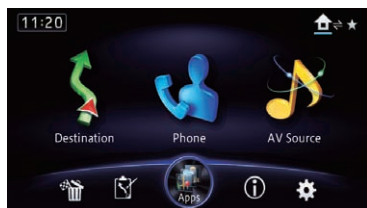
15 Store the microphone carefully in the glove compartment or another safe place.

If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, colour change or malfunction. 

Displaying the screen for app settings

1 Press the HOME button to display the “Top Menu” screen.

2 Touch .

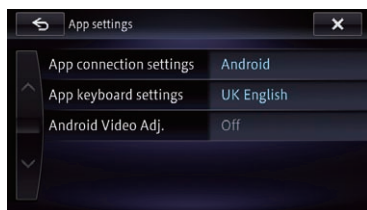


The “Edit/Settings” screen appears.

3 Touch [App settings].

The “App settings” screen appears.

4 Touch the item you want to configure.



Selecting the device connection method

If you want to use the application for iPhone or smartphone on this navigation system, you must select the method for connecting your device.

Settings are required according to the connected device.

“App connection settings” can be set when all of the following conditions are met.

- The AV source is turned off.
- All iPod, smartphone and external storage devices are not connected to this navigation system.

For iPhone with 30-pin connector users

1 Display the “App settings” screen.

- For details of the operations, refer to *Displaying the screen for app settings* on page 157.

2 Touch [App connection settings].

The “App connection settings” screen appears.

3 Touch [iPhone].

The connection setting of iPhone is enabled. The “iPod Connection Settings” screen appears.

4 Touch [30-pin Connector].

For iPhone with Lightning connector users

1 Display the “App settings” screen.

- For details of the operations, refer to *Displaying the screen for app settings* on page 157.

2 Touch [App connection settings].

The “App connection settings” screen appears.

3 Touch [iPhone].

The connection setting of iPhone is enabled. The “iPod Connection Settings” screen appears.

4 Touch [Digital AV Connector].

For smartphone users

1 Display the “App settings” screen.

- ➔ For details of the operations, refer to *Displaying the screen for app settings* on page 157.

2 Touch [App connection settings].

The “App connection settings” screen appears.

3 Touch [Android].

The connection setting of smartphone (Android device) is enabled.

Setting the keyboard language with application for iPhone

- ❑ This function is only available in **AppRadio Mode** on the iPhone.

You can use the keyboard in **AppRadio Mode** by setting the language of the keyboard for iPhone.

1 Set the language preference for the keyboard of the iPhone.

2 Display the “App settings” screen.

- ➔ For details of the operations, refer to *Displaying the screen for app settings* on page 157.

3 Touch [App keyboard settings].

The “App keyboard selection” screen appears.

4 Touch the desired language.

After the language is selected, the previous screen returns. ■

Setting the rear output

The navigation system’s rear output can be used for a full-range speaker or subwoofer connection. If you switch “**Rear SP**” to “**Sub. W**”, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.

Initially, the navigation system is set for a rear full-range speaker connection (“**Full**”).

- ❑ Both rear speaker leads output and RCA rear output are switched simultaneously in this setting. (When you use the product without RCA rear output, this setting only applies to the rear speaker leads.)
- ❑ “**Rear SP**” can be set when all of the following conditions are met.
 - The AV source is turned off.
 - All iPod, smartphone and external storage devices are not connected to this navigation system.

1 Disconnect the iPhone or smartphone device.

2 Press the HOME button to display the “Top Menu” screen.

3 Touch .

The “Edit/Settings” screen appears.

4 Touch [AV Settings].

The “AV Settings” menu appears.

5 Touch [Rear SP].

6 Touch [Full] or [Sub. W].

- **Full** (default):
When no subwoofer is connected to the rear output, select “**Full**”.
- **Sub. W**
When a subwoofer is connected to the rear output, select “**Sub. W**”. ■

Customising preferences

Adjusting the picture

! CAUTION

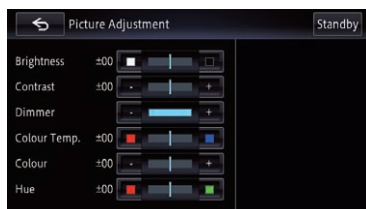
For safety reasons, you cannot use some of these navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the handbrake. Refer to Important Information for the User (a separate manual).

You can adjust the picture for each source and rear view camera.

1 Press and hold the MODE button.

The "Picture Adjustment" screen appears.

2 Touch the right and left touch panel keys to make an adjustment.



- **Brightness:**
Adjusts the black intensity.
 - **Contrast:**
Adjusts the contrast.
 - **Dimmer:**
Adjusts the brightness of display.
 - **Colour Temp.:**
Adjusts the tone of colour (which colour is emphasised, red or blue).
 - **Colour:**
Adjusts the colour saturation.
 - **Hue:**
Adjusts the tone of colour (which colour is emphasised, red or green).
- ☐ Touching [Standby] while adjusting the rear view camera image clears the screen temporarily.
- ➞ For details, refer to *Temporarily clearing the screen (navigation system in standby mode)* on page 23.

- ☐ The adjustments of "Brightness" and "Contrast" are stored separately when your vehicle's headlights are off (daytime) and when your vehicle's headlights are on (nighttime). These are switched automatically depending on whether the vehicle's headlights are on or off.
- ☐ The adjustments of "Dimmer" is stored separately when your vehicle's headlights are off (daytime) and when your vehicle's headlights are on (nighttime). "Dimmer" is switched automatically only when the value of nighttime is lower than that of daytime.
- ☐ You cannot adjust "Colour" and "Hue" for the source without a video and navigation map display.
- ☐ The setting contents can be memorised separately for the following screen and the video image.

• Audio source

- **Radio/CD-ROM/iPod (Music)/SD (audio)/USB (audio)/Bluetooth Audio/source off screen/menu screens/others**

• Video source

- **AppRadio Mode (iOS) (Video) and iPod (Video)**
- **AppRadio Mode (iOS (HDMI connection)) (Video) and AppRadio Mode (Android) (Video)**
- **DVD-V and DivX**
- **SD (Video)**
- **USB (Video)**
- **AV1 (Video)**
- **AV2 (Video)**
- **Rear view camera image**

• Map screen

- ☐ The picture adjustment may not be available with some rear view cameras.
- ☐ Because of the LCD screen characteristics, you may be unable to adjust the screen at low temperatures.

3 Touch .

The previous screen returns. ☐

Selecting the video for rear display

You can choose either to show the same image as the front screen or to show the selected source on the rear display.

1 Display the AV operation screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 76.

2 Touch on the left edge of the screen.

- ❑ If the source icon to be displayed on the rear display does not appear on the AV operation screen, turn on the setting of **[Rear Monitor Output]**.
 - For details, refer to *Displaying the icon for setting the rear display output* on page 147.
- ❑ The appearance of this key changes according to the current setting.
- ❑ While the tuner is receiving an emergency announcement, traffic announcement, or news programme, the current setting cannot be changed.

3 Touch the source you want to show on the rear display.

The source you can select is as follows.

- **Mirror AV:**
The video on the front screen of the navigation unit is output to the rear display.
- **Disc:**
The video and sound of the DVDs are output to the rear display.
- **iPod:**
The video and sound of the iPod are output to the rear display.
- **AV1:**
The video and sound of **AV1** are output to the rear display.
- **AV2:**
The video and sound of **AV2** are output to the rear display.
- **Off:**
Nothing is output to the rear display.

- ❑ Touching  closes the pop-up screen.
- ❑ When "**Mirror AV**" is selected, the following restrictions are applied to rear display.
 - When selecting "**Rear View**" in the map display, nothing is displayed.
 - All sounds cannot be output for the rear display.
 - When playing back video files on the external storage device (USB, SD), the video image is not output.
 - The picture may have noise if the iPod video is output to the rear display.
- ❑ When "**Disc**" is selected, the following restriction is applied to rear display.
 - When a CD or MP3/WMA/AAC disc is set in the built-in DVD drive, only the sound is output.
- ❑ When "**iPod**" is selected, the following restriction is applied to rear display.
 - The picture may have noise if the iPod video is output to the rear display.
- ❑ When "**AV1**" or "**AV2**" is selected, the following restrictions are applied to the rear display.
 - The video image and sound are output only when "**AV1**" or "**AV2**" has both video and sound.
 - The video image and sound are output only when the corresponding settings on "**AV1 Input**" or "**AV2 Input**" are "**On**". 

Replicating the settings

You can import settings you have made on the utility programme NavGate FEEDS which is available separately to the navigation system.

- ❑ NavGate FEEDS is available on our website.

1 Use NavGate FEEDS to replicate the settings and store them on an SD memory card.

Customising preferences

2 Insert an SD memory card into the SD card slot.

- For details of the operation, refer to *Inserting and ejecting an SD memory card* on page 18.

A message confirming whether to update the settings appears.

3 Touch [Yes].

Update starts.

After the settings are updated, a message notifying completion of update appears.

4 Touch [OK].

The navigation system restarts. 

Using the rear view camera functions

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND-BC6). (For details, consult your dealer.)

Rear view camera

The navigation system features a function that automatically switches to the full-screen image of the rear view camera installed on your vehicle. When the gearstick is in the REVERSE (R) position, the screen automatically switches to full-screen rear view camera image.

Camera for Rear view mode

Rear view can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please note that with this setting, camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable.

- For details, refer to *Setting for rear view camera* on page 161.

Setting for rear view camera



CAUTION

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.

- ☐ Immediately verify whether the display changes to a rear view camera image when the gearstick is moved to REVERSE (R) from another position.
- ☐ When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in "Polarity".

Setting the rear view camera activation

1 Display the "System Settings" screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Back Camera Settings].

The "Back Camera Settings" screen appears.

3 Touch [Camera].

This changes the setting to "On".

- ☐ You can only switch to "Rear View" if this setting is "On".
- For details of the operation, refer to *Switching the view mode* on page 34.

Setting the polarity of the rear view camera

1 Display the "System Settings" screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Back Camera Settings].

The "Back Camera Settings" screen appears.

3 Touch [Polarity].

4 Touch [GND] or [Battery] to select an appropriate setting for polarity.

- Battery (default):

When the polarity of the connected lead is positive while the gearstick is in the REVERSE (R) position.

- **GND:**
When the polarity of the connected lead is negative while the gearstick is in the REVERSE (R) position.

When the gearstick is moved to the REVERSE (R) position after setting the rear view camera, the rear view image appears.

Displaying the parking assist guidelines

1 Display the "System Settings" screen.

- ➔ For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Back Camera Settings].

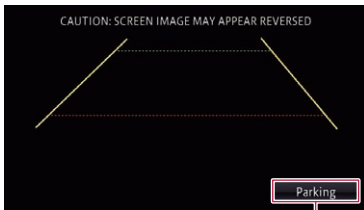
The "Back Camera Settings" screen appears.

3 Touch [Parking Assist Line].

4 Touch [On] or [Off].

- **Off** (default):
The guideline disappears.
- **On:**
The guideline appears.

When the gearstick is moved to the REVERSE (R) position after setting the rear view camera, the rear view image appears.



①

- ① Switches the display to the "Parking Assist" screen.
 - ❑ Because the Vehicle Bus adapter cannot connect to this product, this key is always inactive.

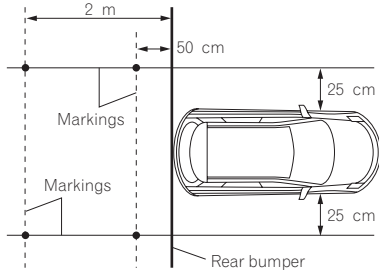
Setting guidelines on the rear view image

! CAUTION

- When adjusting the guidelines, be sure to park the vehicle in a safe place and apply the handbrake.
- Before getting out of the car to place the markings, be sure to turn the ignition switch off (ACC OFF).
- The range projected by the rear view camera is limited. Also, the vehicle width and distance guidelines displayed on the rear view camera image may differ from the actual vehicle width and distance. (The guidelines are straight lines.)
- The image quality may deteriorate depending on the usage environment, such as at night or in dark surroundings.

1 Park your vehicle in a safe place and apply the handbrake.

2 Using packing tape or similar, place markings approximately 25 cm from each side of the vehicle, and approximately 50 cm and 2 m from the rear bumper.



3 Display the "System Settings" screen.

- ➔ For details, refer to *Displaying the screen for system settings* on page 143.

4 Touch [Back Camera Settings].

The "Back Camera Settings" screen appears.

5 Touch [Parking Assist line adj].

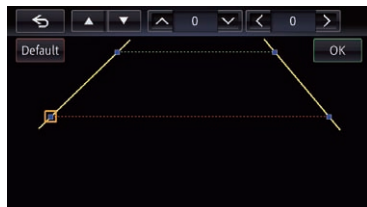
A confirmation message appears.

Customising preferences

6 Touch [OK].

The screen for setting the guidelines appears.

7 Touch or to select a point.



8 Touch , , or to adjust the position of the point.

- ☐ When a point is moved, the distance from the initial value is displayed at the top right of the screen.

9 Touch [OK].

The set value is saved and the rear view image appears.

- If you touch [Default], the point returns to the preadjustment position.
- If you touch , the display returns to the setting screen for guidelines without reflecting the setting. .

Setting the safe mode

For safety reasons, you can limit the functions that are available while your vehicle is in motion.

1 Display the "Edit/Settings" screen.

- ➞ For details of the operations, refer to *How to use the navigation menu screens* on page 24.

2 Touch [Safe Mode].

The "Safe Mode" screen appears.

3 Touch [On] or [Off].

- **On** (default):
Activates the safe mode function.
- **Off**:
Deactivates the safe mode function. .

Displaying the operation status of vehicle equipment

By connecting the optional Vehicle Bus adapter, you can display the operation status of the vehicle's parking sensor function and climate control panel on the navigation screen.

CAUTION

- For information on installing the Vehicle Bus adapter, see the operating manual of the Vehicle Bus adapter.
- After installing the Vehicle Bus adapter, be sure to check operations.
- For details about vehicle models that are compatible with Vehicle Bus adapters, refer to the information on our website.
- Functions and displays vary depending on the vehicle model. For details of the functions available according to model, refer to the information on our website.

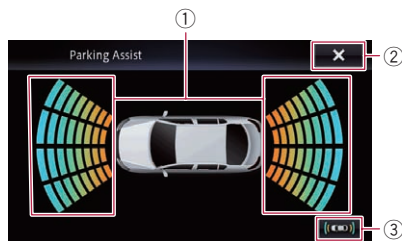
Displaying obstacle detection information

CAUTION

This function is intended solely to assist the driver's vision. It does not detect all dangers and obstacles and is not a substitute for your attentiveness, judgement, and care while parking your vehicle.

Turn on the parking assist sensor on your vehicle, and the navigation screen will switch to the **"Parking Assist"** screen.

- ❑ This function is only available for vehicles equipped with a parking sensor system.
- ❑ The **"Parking Assist"** screen is not displayed until the navigation screen has started.



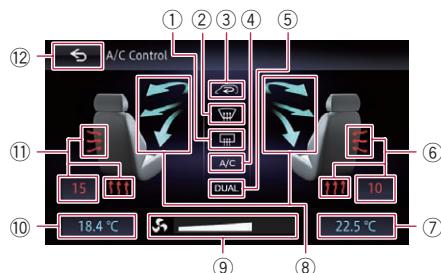
- ① Displays the position of detected obstacles.
- ② The previous screen returns.
- ③ Switches the display to the rear view camera image.
 - ❑ The display switches only when the rear view camera setting is set to **"On"** and the gearstick is in the REVERSE (R) position. ❑

Displaying the operating status of the climate control panel

When you operate the climate control panel of the vehicle, the navigation screen switches automatically to the **"A/C Control"** screen.

- ❑ The settings of the climate control panel operated before the navigation system is started are not displayed on the screen.
- ❑ Any climate control panel settings of the vehicle that are turned off are not displayed on the screen.
- ❑ If the information displayed on the navigation screen is reversed for the left and right sides of the vehicle, change the **"Reverse AC Display"** setting to **"On"**.
 - ➔ For details of the operations, refer to *Reversing the climate control status display* on page 147.

Displaying the operation status of vehicle equipment



- ① Displays that the rear window heating setting is on.
- ② Displays that the front window heating setting is on.
- ③ Displays that the internal circulation mode setting is on.
- ④ Displays that the A/C setting is on.
- ⑤ Displays that the dual A/C function is on.
- ⑥ Displays the seat heating setting for the right seat.
- ⑦ Displays the internal temperature setting for the right seat.
- ⑧ Displays the fan direction.
- ⑨ Displays the fan speed.
- ⑩ Displays the internal temperature setting for the left seat.
- ⑪ Displays the seat heating setting for the left seat.
- ⑫ The previous screen returns.
 - ❑ If you do not operate the climate control panel for a few seconds, the previous screen is displayed automatically. ■

Setting the anti-theft function

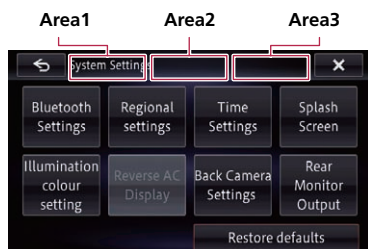
You can set a password for the navigation system. If the back-up lead is cut after the password is set, the navigation system prompts for the password at the time of next boot up.

Setting the password

1 Display the "System Settings" screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch Area1, followed by Area2, and then touch and hold Area3.



3 Touch [Set Password].

The password setting screen appears.

4 Enter the password you want to set.

- ❑ 5 to 16 characters can be entered for a password.

5 Touch [OK].

6 Enter a password hint.

- ❑ Up to 40 characters can be entered for a hint.

7 Touch [OK].

The "Password confirmation" screen appears.

- ❑ If you want to change the password currently set, enter the current password and then enter the new one.

8 Check the password, and then touch



Entering the password

On the password input screen, you must enter the current password.

1 Enter the password.

2 Touch [OK].

If you enter the correct password, the navigation system will be unlocked.

Deleting the password

The current password can be deleted.

1 Display the "System Settings" screen.

- For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch Area1, followed by Area2, and then touch and hold Area3.

3 Touch [Clear password].

A message confirming whether to delete the password appears.

4 Touch [Yes].

The password setting screen appears.

A message confirming a password hint appears.

5 Touch [OK].

6 Enter the current password.

7 Touch [OK].

Forgotten password

Contact the nearest authorised Pioneer Service Station. ■

Other functions

Restoring the navigation system to the default or factory settings

You can restore settings or recorded content to the default or factory settings. Various methods are used to clear user data, and the situations and the cleared content differ in each case. For information regarding the content cleared by each method, see the list presented later.

Method 1: Remove the vehicle battery

This transforms the system into the same state as when the navigation system is uninstalled.

Method 2: Touch the item you want to initialise on the "Restore defaults" screen

➤ For details, refer to *Restoring the default setting* on page 167.

Method 3: Touch [Restore factory settings]

➤ For details, refer to *Restoring the navigation system to the initial state* on page 167.

Restoring the default setting

Resets various settings registered to the navigation system and restores them to the default or factory settings.

- ❑ Be sure to read "Setting items to be deleted" before you perform this operation.
 - For details, refer to *Setting items to be deleted* on page 168.

1 Display the "System Settings" screen.

➤ For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Restore defaults].

3 Touch the item you want to initialise.



A message confirming whether to erase the data appears.

4 Touch [Yes].

The selected item is initialised.

Restoring the navigation system to the initial state

You can return settings or recorded content to the default or factory settings.

- ❑ Be sure to read "Setting items to be deleted" before you perform this operation.
 - For details, refer to *Setting items to be deleted* on page 168.

1 Display the "System Settings" screen.

➤ For details, refer to *Displaying the screen for system settings* on page 143.

2 Touch [Restore defaults].

3 Touch [Restore factory settings].

A message confirming whether to erase the data appears.

4 Touch [Yes].

The recorded contents are cleared, and the navigation system restarts.

Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table will be restored to the default or factory settings. Any items not listed below will be retained.

—: The setting will be retained.

✓: The setting will be cleared and restored to the default or factory settings.

□ Bold indicates functions or command names.

- **Method 1: Remove the vehicle battery**
- **Method 2: Touch the item you want to initialise on the “Restore defaults” screen**
- **Method 3: Touch [Restore factory settings]**

Setting items to be deleted		Method 1	Method 2	Method 3
All settings in the “ Navi Settings ” screen		—	✓	✓
All settings in the “ Edit Data ” screen		—	✓	✓
All settings in the “ AV Settings ” screen		—	—	✓
Source Settings	AV Input	✓	—	✓
	Other settings	—	—	✓
Vol./Pos. Adj.	Volume Set-tings	—	✓	✓
	Other settings	—	—	✓
All settings in the “ Language settings ” screen		—	—	✓
All settings in the “ Time Settings ” screen		—	—	✓
All settings in the “ Select Splash Screen ” screen		—	✓	✓
All settings in the “ Illumi Colour Setting ” screen		—	—	✓
All settings in the “ Reverse AC Display ” screen		—	—	✓
Back Camera Settings	Polarity	✓	—	✓
	Other settings	—	—	✓
All settings in the “ Rear Video Output ” screen		—	—	✓
All settings in the “ Safe Mode ” screen		—	✓	✓
All settings in the “ App settings ” screen	Android Video Adj.	✓	✓	✓
	Other settings	—	—	✓
Shortcut Menu settings		—	✓	✓
Learning route data		—	—	✓
View mode and scale setting on the map, direc- tion of the map		—	—	✓
Route search results		—	—	✓
Current route		—	—	✓

Other functions

Setting items to be deleted		Method 1	Method 2	Method 3
Volume setting for AV sources, TA volume		✓	—	✓
All settings and stored data in the "Phone" screen		—	✓	✓
Overlay POI in the "View" screen		—	✓	✓
Track log		—	—	✓
All settings in the "AV Sound Settings" screen		✓	—	✓
Wide screen mode		✓	—	✓
Sound mix function		—	—	✓
Playback method of AV source		✓	—	✓
All settings in the "Function" screen		✓	—	✓
Picture Adjustment	Dimmer	—	—	✓
	Other settings	✓	—	✓
LCD panel angle		✓	—	✓
Standby mode		✓	—	✓
Output setting of the rear display		✓	—	✓



Appendix

Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or the nearest authorised Pioneer service facility.

Problems with the navigation screen

Symptom	Cause	Action (Reference)
The power does not turn on. The navigation system does not operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Always install a correct fuse with the same rating.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to off (ACC OFF). Then restart the engine, and turn the power to the navigation system back on.
You cannot position your vehicle on the map without a significant positioning error.	The GPS aerial is in an unsuitable location.	The quality of signals from the GPS satellites is poor, impairing positioning accuracy. Check the GPS signal reception and the position of the GPS aerial if necessary.
	Obstacles are blocking signals from the satellites.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS aerial if necessary, or continue driving until reception improves. Keep the aerial clean.
	The position of satellites relative to your vehicle is inadequate.	The quality of signals from the GPS satellites is poor, impairing positioning accuracy. Continue driving until reception improves.
	Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Wait until reception improves.
	If a vehicle phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.	The quality of signals from the GPS satellites is poor, impairing positioning accuracy. When using a mobile phone, keep its aerial away from the GPS aerial.

Appendix

Symptom	Cause	Action (Reference)
You cannot position your vehicle on the map without a significant positioning error.	Something is covering the GPS aerial.	Do not cover the GPS aerial with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.
	Signals from the vehicle's speed pulse are not being picked up properly.	Check that the cables are properly connected. If necessary, consult the dealer that installed the system.
	The navigation system may not be mounted securely in your vehicle.	Check that the navigation system is securely mounted and, if necessary, consult the dealer that installed the system.
	The navigation system is installed with an extreme angle exceeding the installation angle limitations.	Confirm the installation angle. (The navigation system must be installed within the allowed installation angle. For details, refer to the Installation Manual.)
The map colour does not switch automatically between daytime and nighttime.	Indication of the position of your vehicle is misaligned after a U-turn or reversing.	Check whether or not the reverse gear signal input lead (violet) is properly connected. (The navigation system works properly without the lead connected, but positioning accuracy will be adversely affected.)
	" Day/Night Display " is set to " Day ".	Check the " Day/Night Display " setting and ensure " Automatic " is selected. (Page 138)
The screen is too bright.	The orange/white lead is not connected.	Check the connection.
	The picture quality adjustment of the display is incorrect.	Adjust the picture quality. (Page 159)
The display is very dim.	The vehicle's light is turned ON, and " Automatic " is selected on " Day/Night Display ".	Read about " Day/Night Display " setting and, if desired, select " Day ". (Page 138)
	The picture quality adjustment of the display is incorrect.	Adjust the picture quality. (Page 159)
No sounds of AV source are produced. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	The attenuator or mute is on.	Turn the attenuator or mute off.
	A speaker lead is disconnected.	Check the connection.
The volume of navigation guidance and beeps cannot be adjusted.	The VOL (+/-) button is used to adjust the volume.	Turn the volume up or down using " Volume Settings " on the " Vol./Pos. Adj. " menu. (Page 135)
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: —Lower the volume on the receiver —Have both parties pause slightly before speaking
There is no picture.	The handbrake cord is not connected.	Connect the handbrake cord, and apply the handbrake.
	The handbrake is not applied.	Connect the handbrake cord, and apply the handbrake.
	The backlight of the LCD panel is turned off.	Turn on the backlight. (Page 23)

Appendix

Symptom	Cause	Action (Reference)
Rear display picture disappears.	The source disc being listened to in the navigation system has been ejected.	Before ejecting the disc, switch the source. This problem may occur when certain connection methods are used.
	There is a problem with the rear display, for example a faulty wiring connection.	Check the rear display and its connection.
	An AV source that cannot output to the rear display is selected.	Select an appropriate AV source.
Nothing is displayed and the touch panel keys cannot be used.	The setting for the rear view camera is incorrect.	Select the appropriate setting for the rear view camera.
	The gearstick was placed in [R] when the rear view camera was not connected.	Select the correct polarity setting for "Back Camera Settings" . (Page 161)
There is no response when the touch panel keys are touched, or a different key responds.	The touch panel keys deviate from the actual positions that respond to your touch for some reason.	Perform touch panel calibration. (Page 145)
The external storage device (USB, SD) cannot be used.	The USB storage device has been removed immediately after plugging it in.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to off (ACC OFF). Then restart the engine, and turn the power to the navigation system back on.
The screen becomes freezes.	An error has occurred.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to off (ACC OFF). Then restart the engine, and turn the power to the navigation system back on.
The smartphone was not charged.	Charging stopped because the temperature of the smartphone rose due to prolonged use of the smartphone during charging.	Disconnect the smartphone from the cable, and wait until the smartphone cools down.
	More battery power was consumed than was gained from charging.	This problem may be resolved by stopping any unnecessary services on the smartphone.

Problems with the AV screen

Symptom	Cause	Action (Reference)
CD or DVD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean the disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the disc are in an irregular file format.	Check the file format.
	The disc format cannot be played back.	Replace the disc.
	The loaded disc is a type this system cannot play.	Check what type of disc it is. (Page 185)
The screen is covered by a caution message and the video cannot be shown.	The handbrake lead is not connected or applied.	Connect the handbrake lead correctly, and apply the handbrake.
	The handbrake interlock is activated.	Park your vehicle in a safe place and apply the handbrake.

Appendix

Symptom	Cause	Action (Reference)
No video output from the connected equipment.	The "AV1 Input" or "AV2 Input" setting is incorrect.	Correct the settings. (Page 122)
The audio or video skips.	The navigation system is not firmly secured.	Secure the navigation system firmly.
No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is performing still, slow motion, or frame-by-frame playback with DVD-Video.	There is no sound during still, slow motion, or frame-by-frame playback with DVD-Video.
	The system is paused or performing, fast reverse or forward during the disc playback.	For the media other than music CD (CD-DA), there is no sound on fast reverse or forward.
The icon  is displayed, and operation is impossible.	The operation is not compatible with the video configuration.	This operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.)
The picture stops (pauses) and the navigation system cannot be operated.	The reading of data is impossible during disc playback.	Stop playback once, then restart.
The picture is stretched, with an incorrect aspect ratio.	The aspect setting is incorrect for the display.	Select the appropriate setting for that image. (Page 101)
A parental lock message is displayed and DVD playback is not possible.	The parental lock is on.	Turn the parental lock off or change the level. (Page 101)
The parental lock for DVD playback cannot be cancelled.	The code number is incorrect.	Input the correct code number. (Page 101)
Playback is not with the audio language and subtitle language settings selected in "DVD/DivX® Setup".	The DVD playing does not feature dialogue or subtitles in the language selected in "DVD/DivX® Setup".	Switching to a selected language is not possible if the language selected in "DVD/DivX® Setup" is not recorded on the disc. (Page 100)
The picture is extremely unclear/distorted and dark during playback.	The disc features a signal to prohibit copying. (Some discs may have this.)	Since the navigation system is compatible with the copy guard analogue copy protect system, the picture may suffer from horizontal stripes or other imperfections when a disc with that kind of protection signal is viewed on some displays. This does not mean the navigation system is malfunctioning.
iPod cannot be operated.	The iPod is frozen.	- Reconnect the iPod with the USB interface cable for iPod / iPhone. - Update the iPod software version.
	An error has occurred.	- Reconnect the iPod with the USB interface cable for iPod / iPhone. - Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to off (ACC OFF). Then restart the engine, and turn the power to the navigation system back on. - Update the iPod software version.
	Cables are not connected correctly.	Connect the cables correctly.

Appendix

Symptom	Cause	Action (Reference)
Sound from the iPod cannot be heard.	The audio output direction may switch automatically when the Bluetooth and USB connections are used at the same time.	Use the iPod to change the audio output direction.

Problems with the phone screen

Symptom	Cause	Action (Reference)
Dialling is impossible because the touch panel keys for dialling are inactive.	Your phone is out of range for service.	Retry after re-entering the range for service.
	The connection between the mobile phone and the navigation system cannot be established now.	Perform the connection process.

Problems with the AppRadio Mode screen

Symptom	Cause	Action (Reference)
A black screen is displayed.	While operating an application, the application was ended on the smartphone side.	Press the HOME button to display the " Top Menu " screen.
	The smartphone OS may be awaiting screen operation.	Stop the vehicle in a safe place and check the screen on the smartphone.
The screen is displayed, but operation does not work at all.	An error has occurred.	• Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again. • When an Android device is connected, disconnect the Bluetooth connection from this product and then reconnect it.



Appendix

Messages for navigation functions

The following messages may be displayed by your navigation system. Refer to the table to identify the problem, then take the suggested corrective action.

There are occasions when you may see error messages other than those shown here. In such cases, follow the instructions given on the display.

Message	Cause	Action (Reference)
Route calculation was not possible.	Route calculation has failed because of a malfunction in the map data, software, or hardware.	• Change the destination. • Consult the Pioneer Local dealer if this message persists.
Route calculation not possible: destination is too far.	The destination is too far.	Set a destination closer to the starting point.
Route calculation not possible: destination is too close.	The destination is too close.	Set a destination farther from the starting point.
Route calculation not possible: navigation cannot be provided around destination or starting point.	The destination, waypoint(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.	• Set a destination and waypoint(s) on roads. • Reset the destination after you drive the vehicle to any road.
Unable to find any road leading to destination	The destination or waypoint(s) are in an isolated island, etc. without a ferry and the route calculation is impossible. If there is no road connected to your starting point or destination, this message will appear.	Change the destination.
Failed to make the route profile.	In rare cases, a route calculation error may occur.	• Retry. • Consult the Pioneer Local dealer if this message persists.
No image file.	"Pictures" folder exists on the SD memory card but there is no loadable data in the folder.	Use appropriate data and store it correctly. (Page 145)
Unsupported file format.	An image file was not made to specifications as the splash screen.	Use appropriate data and store it correctly. (Page 145)
An anomaly was detected on the speaker output. Please turn the Ignition OFF/ON to restart. If the problem persists, Please contact your Pioneer dealer or Service Center.	This unit fails to operate or the speaker connection is incorrect; the protective circuit is activated.	Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorised Pioneer Service Station for assistance.



Appendix

Messages for AV functions

When problems occur with AV source playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your dealer or your nearest Pioneer service centre. The messages in “()” will appear on the rear display.

Built-in DVD drive

Message	Cause	Action (Reference)
Playback error. Please remove the disc.	Dirty	Clean the disc.
	Scratched disc	Replace the disc.
	The disc is loaded upside down.	Check that the disc is loaded correctly.
	There is an electrical or mechanical error.	• Replace the disc. • Set the ACC to off and then set it to on again.
Region code cannot be matched (DIFFERENT REGION DISC)	The disc does not have the same region number as the navigation system.	Replace the DVD-Video with one bearing the correct region number.
Unreadable disc (UNPLAYABLE DISC)	This type of disc cannot be played by the navigation system.	Replace the disc with one the navigation system can play. (Page 188, Page 204)
Playback error due to irregular temperature. Please remove the disc. (THERMAL PROTECTION IN MOTION)	The temperature of the navigation system is out of the normal operating range.	Wait until the unit's temperature returns within normal operating limits.
Tracks that cannot be played back will be skipped (FILE SKIPPED)	Files that are protected by digital rights management (DRM).	The protected files are skipped.
Cannot play back all tracks (PROTECTED DISC)	All the files on the inserted disc are secured by DRM.	Replace the disc.
Flash write error. Unable to write to flash memory. (CAN NOT SAVE DATA)	The playback history for VOD contents cannot be saved for some reason.	• Retry. • If the message appears frequently, consult your dealer.
Your device is not authorised to play this protected DivX video. (YOUR DEVICE IS NOT AUTHORIZED TO PLAY THIS DivX PROTECTED VIDEO)	The device does not match the device registered with the VOD provider. VOD content cannot be played back.	Check whether this device has been registered with the VOD provider.
Unable to play back. Refer to Operation Manual for playable file format. (VIDEO RESOLUTION NOT SUPPORTED)	High definition (HD) DivX video cannot be played.	Create playable one and retry.

SD/USB/iPod

Message	Cause	Action (Reference)
Tracks that cannot be played back will be skipped	Files that are protected by digital rights management (DRM).	The protected files are skipped.
	This type of file cannot be played by this unit.	Replace it with a playable file. (Page 188, Page 204)

Appendix

Message	Cause	Action (Reference)
Cannot play back all tracks	All the files on the inserted external storage device are secured by DRM.	Store playable files.
	None of the files can be played by this unit.	Replace it with a playable file. (Page 188, Page 204)
USB flash drive was disconnected for device protection. Do not connect this USB flash drive to the unit. To restart USB, restart the unit.	The USB connector or USB cable is short-circuited.	Confirm that the USB connector or USB cable is not caught in something or damaged.
	The connected USB storage device consumes more than the maximum allowable current.	Disconnect the USB storage device and do not use it. Turn the ignition switch to off, then turn ACC back on or turn the ignition switch on and then connect the compliant USB storage device.
	The USB interface cable for iPod / iPhone is short-circuited.	Confirm that the USB interface cable for iPod / iPhone or USB cable is not caught in something or damaged.
Authorization failure. iPod is not connected.	The iPod is not compatible with this navigation system.	Use a compatible iPod.
	Communication failure	• Disconnect the cable from the iPod. Once the iPod main menu is displayed, reconnect the cable. • If the message appears frequently, consult your dealer.



Appendix

Messages for Bluetooth functions

When problems occur with Bluetooth functions, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your dealer or your nearest Pioneer service centre.

Message	Cause	Action (Reference)
Currently unable to register	The Bluetooth device that you want to register is under communication such as transferring phone book.	After finishing the communication, register the Bluetooth device again.
Unable to connect the device. Try again later.	This navigation system is trying to connect to the Bluetooth device while performing the following operations with another device. • Registering the Bluetooth device • Setting to connect the Bluetooth device • Transferring the phone book	After the operation of another device is complete, reconnect the Bluetooth device.
Unable to register Bluetooth device.	An error has occurred.	Set the " Bluetooth On/Off " to " Off ", and then set to " On ". Subsequently, operate to register again.
Could not find any available phone.	No available phone is in the surrounding area when the system searches for connectable mobile phones featuring Bluetooth wireless technology.	• Activate the target phone's Bluetooth wireless technology. • Check whether your mobile phone is activated and, whether the distance to your mobile phone is too far.
Unable to search for available devices.	This navigation system is trying to search for available device while performing following operations. • Registering the Bluetooth device • Setting to connect the Bluetooth device • Transferring the phone book • Deleting the registered Bluetooth device	After finishing the operation, search for available devices again.
Device search failed.	An error has occurred.	Set the " Bluetooth On/Off " to " Off ", and then set to " On ". Subsequently, search for available devices again.
Unable to change device name.	An error has occurred.	Set the " Bluetooth On/Off " to " Off ", and then set to " On ". Subsequently, operate to change the device name again.
Currently unable to delete.	This navigation system is trying to delete the registered Bluetooth device while performing the following operations. • Using the hands-free phoning • Registering Bluetooth device • Setting to connect the Bluetooth device • Transferring the phone book	After finishing the operation, delete the Bluetooth device again.
Delete failed	An error has occurred.	Set the " Bluetooth On/Off " to " Off ", and then set to " On ". Subsequently, operate to delete the Bluetooth device again.

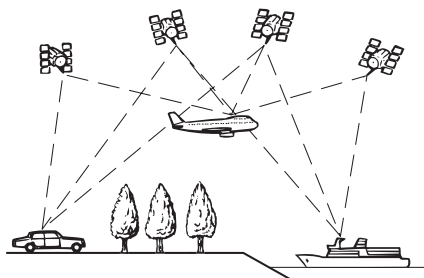
Appendix

Positioning technology

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



Positioning by dead reckoning

The built-in sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the gyro sensor and inclination of the road with the G sensor.

The built-in sensor can even calculate changes of altitude, and correct the discrepancies in the distance travelled caused by driving along winding roads or up slopes.

If you use this navigation system with connecting the speed pulse, the system will become more accurate than no connection of speed

pulse. So you connect the speed pulse without fail to get the accuracy of positioning.

- ❑ The position of the speed detection circuit vary depending on the vehicle model. For details, consult your authorised Pioneer dealer or an installation professional.
- ❑ Some types of vehicles may not output a speed signal while driving at just a few kilometres per hour. In such a case, the current location of your vehicle may not be displayed correctly while in traffic jam or in a car park.

How do GPS and dead reckoning work together?

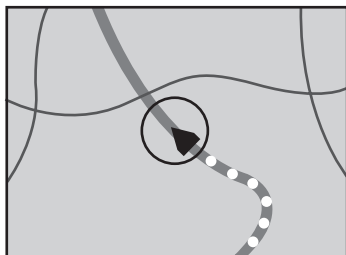
For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the built-in sensor and used to correct it for improved accuracy.

- ❑ If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. Initialise the sensor status and it may recover the accuracy to normal condition.
- ➡ For details, refer to *Clearing status* on page 133.

Appendix

Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



Without map matching



Handling large errors

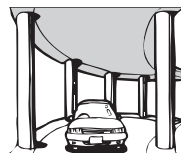
Positioning errors are kept to a minimum by combining GPS, dead reckoning and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When positioning by GPS is impossible

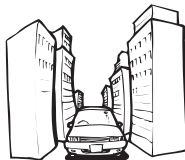
- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

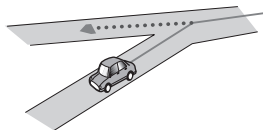
- If a car phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.
- Do not cover the GPS aerial with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the aerial clear.
- ❑ If a GPS signal has not been received for a long time, your vehicle's actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

Appendix

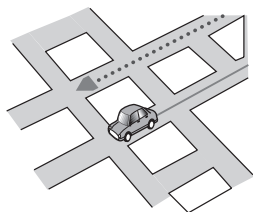
Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are travelling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

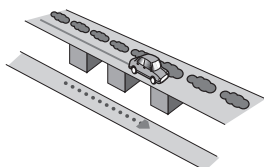
- If you make a slight turn.



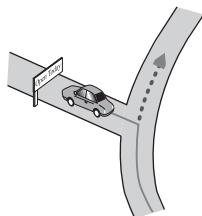
- If there is a parallel road.



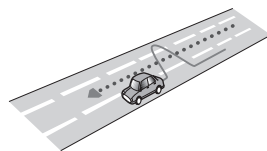
- If there is another road very nearby, such as in the case of an elevated motorway.



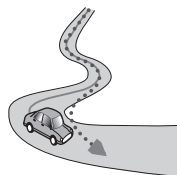
- If you take a recently opened road that is not on the map.



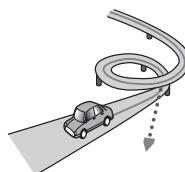
- If you drive in zigzags.



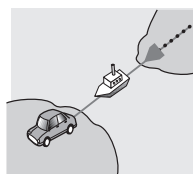
- If the road has a series of hairpin bends.



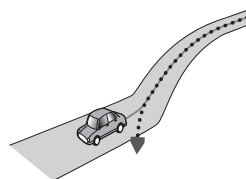
- If there is a loop or similar road configuration.



- If you take a ferry.

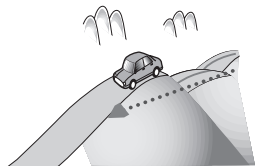


- If you are driving on a long, straight road or a gently curving road.

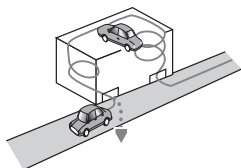


Appendix

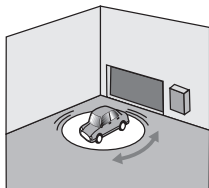
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi-storey car park or similar structure using a spiral ramp.



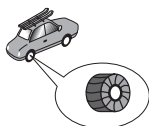
- If your vehicle is turned on a turntable or similar structure.



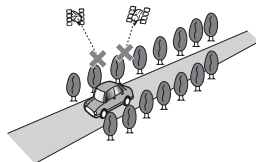
- If your vehicle's wheels spin, such as on a rough track or in snow.



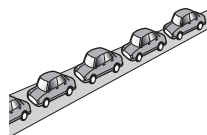
- If you put on chains, or change your tyres for ones with a different size.



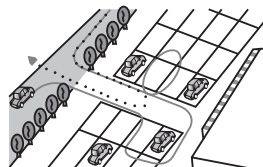
- If trees or other obstacles block the GPS signals for a considerable period.



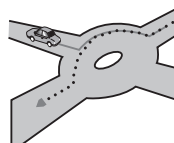
- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.



- If you join the road after driving around a large car park.



- When you drive around a roundabout.



- When starting driving immediately after starting the engine. ■

Appendix

Route setting information

Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.



CAUTION

When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is considered. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

- The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to take. If you need to take a certain street, set a waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the motorway are announced. However, if you pass intersections, turns, and other guidance points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a motorway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your

current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.

- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic jam ahead, a detour route may not be suggested if driving through the traffic jam would still be better than taking the detour.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.
- The number of roundabout exits displayed on the screen may differ from the actual number of roads.

Route highlighting

- Once set, the route is highlighted in bright colour on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Auto reroute function

- If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.
- This function may not work under certain conditions. ■

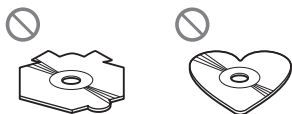
Handling and care of discs

Some basic precautions are necessary when handling your discs.

Appendix

Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.



- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- Use 12-cm discs. Do not use 8-cm discs or an adapter for 8-cm discs.
- When using discs that can be printed on label surfaces, check the instructions and the warnings of the discs. Depending on the discs, inserting and ejecting may not be possible. Using such discs may result in damage to this equipment.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- Do not attach commercially available labels or other materials to the discs.
 - The discs may warp making the disc unplayable.
 - The labels may come off during playback and prevent ejection of the discs, which may result in damage to the equipment.
- To clean a disc, wipe it with a soft cloth, moving outward from the centre.



- Condensation may temporarily impair the built-in drive's performance. Leave it to adjust to the warmer temperature for about

one hour. Also, wipe any damp discs with a soft cloth.

- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear. ■

Playable discs

DVD-Video and CD

DVD and CD discs that display the logos shown below generally can be played on this built-in DVD drive.

DVD-Video



CD



Appendix

- ❑ **DVD** is a trademark of DVD Format/Logo Licensing Corporation.
- ❑ It is not possible to play DVD-Audio discs. This DVD drive may not be able to play all discs bearing the marks shown above.



AVCHD recorded discs

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected.

Playing DualDisc

- DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this navigation system. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this navigation system.
- Frequent loading and ejecting of a DualDisc may result in scratches to the disc.
- Serious scratches can lead to playback problems on this navigation system. In some cases, a DualDisc may become stuck in the disc-loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this navigation system.
- Please refer to the manufacturer for more detailed information about DualDiscs.

Dolby Digital

This product will down-mix Dolby Digital signals internally and the sound will be output in stereo.

- ❑ Manufactured under licence from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Detailed information for playable media

Compatibility

Common notes about disc compatibility

- Certain functions of this product may not be available for some discs.
- Compatibility with all discs is not guaranteed.
- It is not possible to playback DVD-ROM/DVD-RAM discs.
- Playback of discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.

DVD-Video discs

- DVD-Video discs that have incompatible region numbers cannot be played on this DVD drive. The region number of the player can be found on this product's chassis.

DVD-R/DVD-RW/DVD-R SL (Single Layer)/DVD-R DL (Dual Layer) discs

- Unfinalised discs which have been recorded with the Video format (video mode) cannot be played back.
- Discs which have been recorded with the Video Recording format (VR mode) cannot be played back.
- DVD-R DL (Dual Layer) discs which have been recorded with Layer Jump recording cannot be played back.
- For detailed information about recording mode, please contact the manufacturer of media, recorders, or writing software.

Appendix

CD-R/CD-RW discs

- Unfinalised discs cannot be played back.
- It may not be possible to playback CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.
- Playback of discs recorded on a personal computer may not be possible, depending on the recording device, writing software, their settings, and other environmental factors.
- Please record with the correct format. (For details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

Common notes about the external storage device (USB, SD)

- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- Depending on the kind of the external storage device (USB, SD) you use, this navigation system may not recognise the storage device or files may not be played back properly.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on an external storage device (USB, SD) with complex folder hierarchies.
- Operations may vary depending on the kind of an external storage device (USB, SD).
- It may not be possible to play some music files from SD or USB because of file characteristics, file format, recorded applica-

tion, playback environment, storage conditions, and so on.

USB storage device compatibility

- For details about USB storage device compatibility with this navigation system, refer to *Specifications* on page 204.
- Protocol: bulk
- You cannot connect a USB storage device to this navigation system via a USB hub.
- Partitioned USB storage device is not compatible with this navigation system.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this navigation system may generate noise on the radio.
- Do not connect anything other than the USB storage device.

The sequence of audio files on USB storage device

For USB storage device, the sequence is different from that of USB storage device.

SD memory card and SDHC memory card

- For details about SD memory card compatibility with this navigation system, refer to *Specifications* on page 204.

Handling guidelines and supplemental information

- This system is not compatible with the Multi Media Card (MMC).
- Copyright protected files cannot be played back.

Appendix

Notes specific to DivX files

- Only DivX files downloaded from DivX partner sites are guaranteed for proper operation. Unauthorised DivX files may not operate properly.
- DRM rental files cannot be operated until playing back is started.
- The navigation system corresponds to a DivX file display of up to 1 590 minutes 43 seconds. Search operations beyond this time limit are prohibited.
- DivX VOD file playback requires supplying the ID code of this navigation system to the DivX VOD provider. Regarding the ID code, refer to *Displaying your DivX VOD registration code* on page 149.
- Plays all versions of DivX video, except for DivX 7 with standard playback of DivX media files.
- For more details about DivX, visit the following site:
<http://www.divx.com/>

DivX subtitle files

- Srt format subtitle files with the extension “.srt” can be used.
- Only one subtitle file can be used for each DivX file. Multiple subtitle files cannot be associated.
- Subtitle files that are named with the same character string as the DivX file before the extension are associated with the DivX file. The character strings before the extension must be exactly the same. However, if there is only one DivX file and one subtitle file in a single folder, the files are associated even if the file names are not the same.
- The subtitle file must be stored in the same folder as the DivX file.
- Up to 255 subtitle files may be used. Any more subtitle files will not be recognised.
- Up to 64 characters can be used for the name of the subtitle file, including the extension. If more than 64 characters are used for the file name, the subtitle file may not be recognised.
- The character code for the subtitle file should comply with ISO-8859-1. Using characters other than ISO-8859-1 may cause the characters to be displayed incorrectly.
- The subtitles may not be displayed correctly if the displayed characters in the subtitle file include control code.
- For materials that use a high transfer rate, the subtitles and video may not be completely synchronised.
- If multiple subtitles are programmed to display within a very short time frame, such as 0.1 seconds, the subtitles may not be displayed at the correct time.

Appendix

Media compatibility chart

General

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File system	• ISO9660 level 1 • ISO9660 level 2 • Romeo, Joliet • UDF 1.02/1.50/2.00/2.01/2.50	• ISO9660 level 1 • ISO9660 level 2 • Romeo, Joliet • UDF 1.02/1.50/2.00/2.01/2.50	FAT16/FAT32	
Maximum number of folders	700		300	
Maximum number of files	999	3 500	5 000	
Playable file types	MP3, WMA, AAC, DivX		MP3, WMA, AAC, WAVE, H.264, MPEG4, WMV	
Notes: • Maximum playback time of audio file stored in the disc: 60 h • Maximum playback time of audio file stored on an external storage device (USB, SD): 7.5 h (450 minutes)				

MP3 compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.mp3			
Bit rate	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)		8 kHz to 48 kHz	
ID3 tag	ID3 tag Ver. 1.0, 1.1, 2.2, 2.3		ID3 tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4	
Notes: • Ver. 2.x of ID3 tag is prioritised when both Ver. 1.x and Ver. 2.x exist. • The navigation system is not compatible with the following: MP3i (MP3 interactive), mp3 PRO, m3u playlist				

Appendix

WMA compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage de- vice	SD memory card
File extension	.wma			
Bit rate	5 kbps to 320 kbps (CBR), VBR			
Sampling frequency	8 kHz to 48 kHz			
Note: The navigation system is not compatible with the following: Windows Media™ Audio 9 Professional, Lossless, Voice				

WAV compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	WAV files on the CD-R/-RW, DVD-R/-RW/-R SL/-R DL cannot be played.		.wav	
Format			Linear PCM (LPCM)	
Sampling frequency			16 kHz to 48 kHz	
Quantisation bits			8 bits and 16 bits	
Note: The sampling frequency shown in the display may be rounded.				

AAC compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage de- vice	SD memory card
File extension	.m4a			
Bit rate	8 kbps to 320 kbps (CBR)			
Sampling frequency	8 kHz to 44.1 kHz		8 kHz to 48 kHz	
Note: The navigation system plays back AAC files encoded by iTunes.				

Appendix

DivX compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.avi/.divx		DivX files on the external storage device (USB, SD) cannot be played.	
Profile (DivX version)	Home Theater Ver. 3.11/Ver. 4.x/Ver. 5.x/Ver. 6.x			
Compatible audio codec	MP3, Dolby Digital			
Bit rate (MP3)	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency (MP3)	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)			
Maximum image size	720 pixels × 576 pixels			
Maximum file size	4 GB			
Notes: • The navigation system is not compatible with the following: DivX Ultra format, DivX files without video data, DivX files encoded with LPCM (Linear PCM) audio codec • Depending on the file information composition, such as the number of audio streams, there may be a slight delay in the start of playback on discs. • If a file contains more than 4 GB, playback stops before the end. • Some special operations may be prohibited because of the composition of DivX files. • Files with high transfer rates may not be played back correctly. The standard transfer rate is 4 Mbps for CDs and 10.08 Mbps for DVDs.				

Appendix

Video files compatibility (USB, SD)

File extension	.avi	.mp4		.m4v	.wmv
Format	MPEG-4	MPEG-4	H.264	MPEG-4	WMV
Compatible video codec	MPEG-4	MPEG-4	H.264	MPEG-4	WMV
Compatible audio codec	Linear PCM (LPCM) MP3	AAC	AAC	AAC	WMA
Maximum resolution	400 pixels x 240 pixels				
Maximum bit rate:	Bit rate: 2.5 Mbps Frame rate: 30 fps	Bit rate: 2.5 Mbps Frame rate: 30 fps	Bit rate: 1.5 Mbps Frame rate: 30 fps	Bit rate: 2.5 Mbps Frame rate: 30 fps	Bit rate: 768 kbps Frame rate: 30 fps
Maximum file size	4 GB				
Maximum play-back time	150 minutes				

Common notes

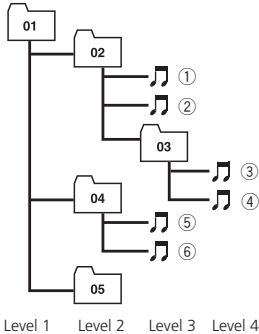
- The navigation system may not operate correctly, depending on the application used to encode WMA files.
- Depending on the version of Windows Media™ Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- The navigation system is not compatible with packet write data transfer.
- This navigation system can recognise up to 32 characters, beginning with the first character, including extension for the file and folder name. Depending on the display area, the navigation system may try to display them with a reduced font size. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

Appendix

Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

 Folder
 File



Notes

- This product assigns folder numbers. The user cannot assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. (A blank list will appear.) Also, these folders will be skipped without displaying the folder number. 

Bluetooth



- The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by PIONEER CORPORATION is under licence. Other trademarks and trade names are those of their respective owners. 

SD and SDHC logo



SD Logo is a trademark of SD-3C, LLC.



SDHC Logo is a trademark of SD-3C, LLC.



microSD Logo is a trademark of SD-3C, LLC.



microSDHC Logo is a trademark of SD-3C, LLC. 

WMA/WMV

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

-  This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a licence from Microsoft Licensing, Inc. 

DivX



Appendix

DivX is a compressed digital video format created by the DivX video codec from DivX, LLC, a subsidiary of Rovi Corporation. This unit can play DivX video files recorded on CD-R/RW/ROM and DVD-R/RW/ROM discs. Keeping the same terminology as DVD video, individual DivX video files are called "Titles". Keep in mind that when naming files/titles on a CD-R/RW or a DVD-R/RW disc prior to burning, they will be played in written order by default.

❑ DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under licence.

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in *Displaying your DivX VOD registration code*. Go to vod.divx.com for more information on how to complete your registration.

➤ For details, refer to *Displaying your DivX VOD registration code* on page 149. ❑

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes. ❑

Android™

Android is a trademark of Google Inc. ❑

Detailed information regarding connected iPod devices

⚠ CAUTION

- Pioneer accepts no responsibility for data lost from an iPod, even if that data is lost while using the navigation system. Please back up your iPod data regularly.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or accelerator pedal.

For details, refer to the iPod manuals.

iPod and iPhone

Made for



iPod



iPhone

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

Appendix

Lightning

Lightning is a trademark of Apple Inc.

App Store

App Store is a service mark of Apple Inc.

iOS

iOS is a trademark on which Cisco holds the trademark right in the US and certain other countries.

iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries. ■

Using app-based connected content

IMPORTANT

Requirements to access app-based connected content services using this product:

- Latest version of the Pioneer compatible connected content application(s) for the smartphone, available from the service provider, downloaded to your iPhone device.
- A current account with the content service provider.
- Smartphone Data Plan.
Note: if the Data Plan for your smartphone does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via 3G and/or EDGE networks.
- Connection to the Internet via 3G, EDGE or Wi-Fi network.
- Optional Pioneer adapter cable connecting your iPhone to the Pioneer navigation system.

Limitations:

- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of al-

lowing your smartphone to connect to the Internet.

- Service availability may be geographically limited to the region. Consult the connected content service provider for additional information.
- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s) for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.

Aha Radio

Aha, Aha Radio and the Aha and Aha Radio logos are either the trademarks or the registered trademarks of Harman International Industries, Incorporated. ■

HDMI



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries. ■

Appendix

MHL

MHL, the MHL Logo, and Mobile High-Definition Link are trademarks or registered trademarks of MHL, LLC in the United States and other countries. ■

Using the LCD screen correctly

Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this navigation system, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in *Specifications*.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the touch panel functions. The LCD screen can scratch easily.

Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the navigation unit, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are

due to the characteristics of the LCD screen and do not indicate a malfunction.

- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or coloured stripes.

Maintaining the LCD screen

- When removing dust from the LCD screen or cleaning it, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

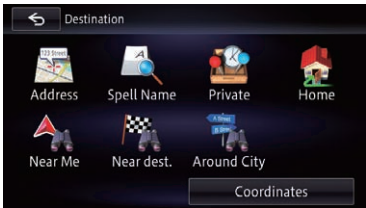
A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorised Pioneer Service Station. ■

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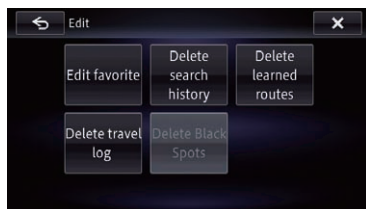
Appendix

Edit/Settings menu



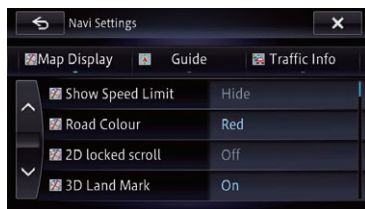
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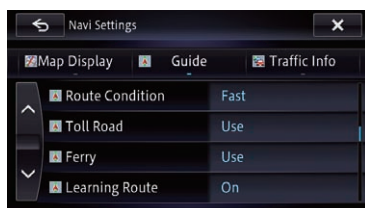
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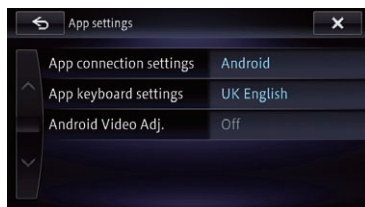
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Setting according to source menu



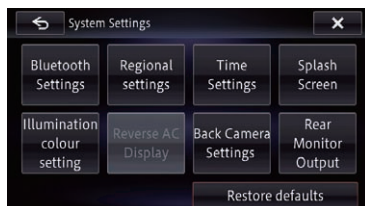
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Appendix

Bluetooth Settings menu



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Appendix

Glossary

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4.

Aspect ratio

This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

Bit rate

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

Built-in sensor

The built-in sensor that enables the system to estimate your vehicle's position.

CD-DA

This stands for a general music CD (commercial-release audio CD). In this manual, this word is sometime used for a distinction between data CDs (which include compressed audio files) and general music CDs.

Chapter

Titles of DVD-Video are in turn divided into chapters which are numbered in the same way as the chapters of a book. With discs featuring chapters, you can quickly find a desired scene with chapter search.

Current location

The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Destination

A location you choose as the end point of your journey.

DivX

DivX is a popular media technology created by DivX, LLC, a subsidiary of Rovi Corporation. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can create your own using your personal content and easy-to-use tools from DivX.com.

DivX Certified®

DivX Certified® products are officially tested by the creators of DivX and guaranteed to play all versions of DivX video, except for DivX 7.

Favourites

A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

GPS

Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Guidance point

These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the flag icon.

Home location

Your registered home location.

ID3 tag

This is a method of embedding track-related information in an MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 tag editing functions. Although the tags are restricted by the number of characters, the information can be viewed when the track is played back.

Appendix

ISO 9660 format

This is the international standard for the format logic of DVD/CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels:

- **Level 1:**
The file name is in 8.3 format (the name consists of up to eight characters, half-byte English capital letters, half-byte numerals and the “_” sign, with a file-extension of three characters).
- **Level 2:**
The file name can have up to 31 characters (including the separation mark “.” and a file extension). Each folder contains less than eight hierarchies.
- **Extended formats**
Joliet:
File names can have up to 64 characters.
Romeo:
File names can have up to 128 characters.

JPEG

This stands for Joint Photographic Experts Group, and is an international still image compression standard.

MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard established by a working group (MPEG) of the ISO (International Organization for Standardization). MP3 is able to compress audio data to about 1/10th the size of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard.

Multi-angle

With regular TV programmes, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

Multi-audio (Multilingual dialogue)

Some videos feature dialogue recorded in multiple languages or audio recorded in multiple tracks. For example, dialogue in up to eight languages can be recorded on a single DVD-Video, letting you choose the language as desired.

Multi-session

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than two sessions in one disc.

Multi-subtitle

For example, subtitles in up to 32 languages can be recorded on a single DVD-Video, letting you choose as desired.

Packet write

This is a general term for a method of writing individual files to a CD-R, etc. whenever required, just as is done with files on floppy or hard disks.

Parental lock

Some DVD-Video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

Phone book

An address book on user's phone is collectively referred to as “Phone book”. Depending on the mobile phone, the phone book may be called a name such as “Contacts”, “Business card” or something else.

Point Of Interest (POI)

Any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

Appendix

Region number

DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player.

Route setting

The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

Set route

The route marked out by the system to your destination. It is highlighted in bright colour on the map.

Title

DVD-Video discs have a high data capacity, enabling recording of multiple videos on a single disc. If, for example, one disc contains three separate videos, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

Track log

Your navigation system logs routes that you already passed through if the track logger is activated. This recorded route is called a "track log". It is handy when you want to check a route travelled or if returning along a complex route.

VBR

VBR is short for variable bit rate. Generally speaking, CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to produce compression-priority data.

Voice guidance

The giving of directions by navigation voice while in guidance.

Waypoint

A location that you choose to visit before your destination; a journey can be built up from multiple waypoints and the destination.

WMA

WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later. 

Appendix

Specifications

General

Rated power source	14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Earthing system	Negative type
Maximum current consumption	10.0 A
Dimensions (W × H × D):	
AVIC-F50BT	
DIN	
Chassis	188 mm × 118 mm × 159 mm
Nose	170 mm × 96 mm × 28 mm
D	
Chassis	178 mm × 100 mm × 167 mm
Nose	170 mm × 96 mm × 20 mm
AVIC-F950DAB	
DIN	
Chassis	188 mm × 118 mm × 159 mm
Nose	170 mm × 97 mm × 19 mm
D	
Chassis	178 mm × 100 mm × 167 mm
Nose	170 mm × 97 mm × 11 mm
AVIC-F950BT	
DIN	
Chassis	188 mm × 118 mm × 159 mm
Nose	170 mm × 97 mm × 19 mm
D	
Chassis	178 mm × 100 mm × 167 mm
Nose	170 mm × 97 mm × 11 mm
AVIC-F850BT	
DIN	
Chassis	188 mm × 118 mm × 159 mm
Nose	170 mm × 97 mm × 19 mm
D	
Chassis	178 mm × 100 mm × 167 mm
Nose	170 mm × 97 mm × 11 mm
Weight:	
AVIC-F50BT	2.46 kg
AVIC-F950DAB	2.22 kg
AVIC-F950BT	2.17 kg
AVIC-F850BT	1.85 kg
NAND flash memory	8 GB

Navigation

GPS receiver:	
System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	12-channel multi-channel reception system
Reception frequency	1 575.42 MHz
Sensitivity	−140 dBm (typ)
Position update frequency	Approx. once per second
GPS aerial:	
Aerial	Micro strip flat aerial/right- handed helical polarisation
Aerial cable	3.55 m
Dimensions (W × H × D)	33 mm × 14.7 mm × 36 mm
Weight	73.7 g

Display

Screen size/aspect ratio:	
AVIC-F50BT	7 inch wide/16:9
AVIC-F950DAB	6.1 inch wide/16:9
AVIC-F950BT	6.1 inch wide/16:9
AVIC-F850BT	6.1 inch wide/16:9
Effective display area:	
AVIC-F50BT	155.2 mm × 81.3 mm
AVIC-F950DAB	135 mm × 70.8 mm
AVIC-F950BT	135 mm × 70.8 mm
AVIC-F850BT	135 mm × 70.8 mm
Pixels	384 000 (800 × 480)
Display method	TFT Active matrix driving
Backlight	LED
Colour system	PAL/NTSC compatible
Tolerable temperature range:	
Power on	−10 °C to +60 °C
Power off	−20 °C to +80 °C
Angle adjustment	
AVIC-F50BT	0° to 22°
AVIC-F950DAB	0°
AVIC-F950BT	0°
AVIC-F850BT	0°

Audio

Maximum power output	50 W × 4 50 W × 2 ch/4Ω + 70 W × 1 ch/2Ω (for subwoofer)
Continuous power output	22 W × 4 (50 Hz to 15 kHz, 5 %THD, 4Ω LOAD, Both Channels Driven)
Load impedance	4Ω (4Ω to 8Ω [2Ω for 1 ch] allowable)
Preout output level (max):	
AVIC-F50BT	4.0 V

Appendix

AVIC-F950DAB	2.2 V
AVIC-F950BT	2.2 V
AVIC-F850BT	2.2 V
Preout impedance:	
AVIC-F50BT	100 Ω
AVIC-F950DAB	1 k Ω
AVIC-F950BT	1 k Ω
AVIC-F850BT	1 k Ω
Equaliser (8-Band Graphic Equaliser):	
Frequency	40 Hz/80 Hz/200 Hz/400 Hz/ 1 kHz/2.5 kHz/8 kHz/10 kHz
Gain	± 12 dB
Loudness contour:	
Low	+3.5 dB (100 Hz), +3 dB (10 kHz)
Mid	+10 dB (100 Hz), +6.5 dB (10 kHz)
High	+11 dB (100 Hz), +11 dB (10 kHz) (volume: -30 dB)
HPF:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope	-12 dB/oct
Subwoofer:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope	-18 dB/oct
Gain	-24/+6 dB
Phase	Normal/Reverse
Bass boost:	
Gain	0 dB to +12 dB
DVD drive	
System	DVD-Video, CD, MP3, WMA, AAC, DivX system
Usable discs	DVD-Video, DVD-R(SL/DL), DVD-RW, CD-ROM, CD-DA, CD-R/RW
Region number	2
Signal format:	
Sampling frequency	44.1 kHz/48 kHz/96 kHz
Number of quantisation bits	16 bit/20 bit/24 bit; linear
Frequency response	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	97 dB (1 kHz) (IEC-A net- work) (CD: 96 dB (1 kHz) (IEC-A network))
Dynamic range	95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion	0.008 % (1 kHz)

Output level:	
Video	1.0 Vp-p/75 Ω (± 0.2 V)
Audio	1.0 V (1 kHz, 0 dB)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1, 2 & 2.5 Audio Layer 3
WMA decoding format	Ver. 7, 8 & 9
AAC decoding format	MPEG-4 AAC (only encoded by iTunes): .m4a
DivX decoding format	Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X : .avi, .divx

USB

USB standard spec.	USB 2.0 High Speed
Max current supply	1 A
File system	FAT16, FAT32
USB class	Mass storage class
Decoding format	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

SD (AVIC-F50BT)

SD memory card, SDHC memory card	
Compatible physical format	Version 2.00
File system	FAT16, FAT32
Decoding format	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

SD (AVIC-F950DAB, AVIC-F950BT and AVIC-F850BT)

microSD card, microSDHC card	
Compatible physical format	Version 2.00
File system	FAT16, FAT32
Decoding format	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

Bluetooth

Version	Bluetooth 2.1 + EDR
Output power	+4 dBm Max. (Power class 2)

FM tuner

Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	9 dBf (0.8 μ V/75 Ω , mono, S/N: 30 dB)
Signal-to-noise ratio	72 dB (IEC-A network)

MW tuner

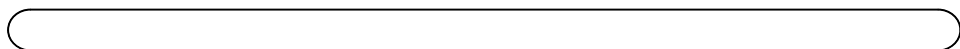
Frequency range	531 kHz to 1 602 kHz (9 kHz)
Usable sensitivity	25 μ V (S/N: 20 dB)
Signal-to-noise ratio	62 dB (IEC-A network)

Frequency range 153 kHz to 281 kHz
Usable sensitivity 28 μ V (S/N: 20 dB)
Signal-to-noise ratio 62 dB (IEC-A network)

Frequency range	
Band III	174.928 MHz to
	239.200 MHz (5A-13F)
L Band	1 452.960 MHz to
	1 490.624 MHz (LA-LW)
Usable sensitivity	-100 dBm
S/N ratio	85 dB



Specifications and design are subject to possible modifications without notice due to improvements. ■



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